THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., JUNE, 1917 No. 1

Original Articles.

ANNUAL ADDRESS.*

M. L. NORWOOD, M. D.,

Loc[illegible]g,

President of the [illegible] Medical Society.

Gentlemen of the Ar[illegible]s Medical Society:

I wish to express to you my appreciation of the honor you have conferred upon me in electing me your president. I am free to admit that the position was [illegible]sired but not sought. Since my election I have done what I could, and will continue to strive to serve you to the best of my ability.

We are always glad to get back to Little Rock, for here we have, due to the central location, the best attendance, a fuller program and ample hotel accommodations. I wish to thank o[illegible]retary, able Editor and competen[illegible], for many and various courtesies shown me during the past medical year. I hope all of you will be pleased with the program composed of entirely Arkansas talent.

ORGANIZATION.

This is an age of organizatio[illegible]out it we can accomplish but little, [illegible]sions, all trades, all labor, in fact, everything that hopes to accomplish anything must first consider perfecting its organization. In medical organization we cannot hope to have a great State Society without first perfecting our county societies, since then the county society is the unit. How can we best succeed? First by selecting a *competent* and *willing* Secretary and also President. When they as leaders do their whole duty the members will usually do theirs by responding when placed on the program and soliciting all eligible doctors in the county to become members. No county organization can be said to be complete unless all, or nearly all eligible material is included. Who should be eligible, this raises the question of the undergraduate.

THE UNDERGRADUATE AND MEDICAL LEGISLATION.

Personally I believe the Arkansas Medical Society will never exert the influence it should in State affairs until our Constitution and By-Laws are amended so as to admit the undergraduate. If the laws give them equal rights to practice, as it gives us, I do not see where we can do any harm by admitting them into our societies. By so doing, we would be a source of inspiration to them and they would make better doctors and be more capable of rendering better service to their patrons. All of us who attend the meetings of this society are inspired with renewed determinations to study more and make better doctors. Then why deprive the undergraduate of this information and inspiration. We have not and can not pass a law to compel them to quit practicing, then let us do the next best thing by doing our best to open up every means we can to educate them. No one will deny that society meetings are great educators of all who are willing to learn. This method will gain their co-operation instead of inviting their antagonism. Let us thus prove that we are broad-gauged and liberal minded as we claim and should be. The undergraduate needs the society influence for reasons already mentioned; the society needs them for the opportunity it gives to do them good educationally and ethically. Furthermore, it needs their assistance when it comes to securing "the ever much needed Medical legislation." We have said to them, we will not admit you to our society meetings; they know nothing of our plans and methods of securing reforms and introducing new legislation, therefore they are naturally suspicious of us, largely through lack of understanding of our motives.

*President's address before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

After several years of observation and experience in matters pertaining to Medical legislation, I am still undecided which of the two classes of doctors are more responsible for the failure to get enacted all legislation this society has asked for, the undergraduate, who fights medical legislation because he is ignorant of the good to be derived therefrom or suspicious of his own safety, or the graduate members of this society who refuse to submit to those in authority in organized medicine, who has his own Senator or Representative introduce a bill just like he wants it and opposes every measure if the wording thereof does not conform to his own individual ideas, forgetting that all legislation is a matter of compromise for the best interest of all.

The Arkansas Legislature is a body of honorable and honest men who want to do what is right and what the people want, and when confronted by your committee on Medical legislation, are usually willing to support our measures; about this time, however, their home doctor writes them to amend the bill or not support it at all; another doctor writes for another amendment and so on; the result is the Representative does not know what to to and is likely to vote against the bill.

I will venture the prediction that if any doctor in this society will present any really needed and desired legislation to the House of Delegates one year from now and gets the Secretary's endorsement and the Committee on Public Policy and Medical Legislation instructed to work for that bill, then give your committee your unqualified endorsement and bury your hammer, if the phraseology don't suit you, but boost instead of knock, it will become a law. The Legislature is not responsible but the Doctors of Arkansas are by their indifference or active opposition for the failure of some much needed legislation. Any doctor or set of doctors who attempts to pass legislation without the approval of the House of Delegates and the Committee on "Public Policy and Medical Legislation" deserves to have the measure defeated.

I think the time has arrived when the society should appropriate a reasonable amount to defray the necessary expenses such as hotel bills, railroad fare and other incidental expenses incurred by future legislative committees.

State Board of Medical Examiners.

This board is composed of capable and progressive men who are guarding well the portals. They have secured reciprocal relations with twenty-four States; this means much to doctors desiring to change their location to another State. It looks like the time is near at hand when our reciprocal relations with a number of States will depend upon the Board Enforcement, as an entrance requirement to our Medical Department of two years preliminary collegiate course in an approved college.

Medical Department of University.

Our Medical Department has made a wonderful improvement in the past few years. According to the best information obtainable, there is being conducted in the Old State Capitol Building a course of instructions that is a credit to any "A" class school, but for the lack of facilities and number of salaried professors in the building on Second and Sherman streets, and for means to sustain such, our Medical Department as a whole stands now on probation and much depends on the financial assistance and improvements otherwise as to whether it will remain in class "B." Let us hope for this assistance and improvements so that no Arkasnas boy need to feel that he has to leave his home State to secure his Medical education.

State Board of Health.

Public Health Act No. 96 stands as a law, recommended by the Arkansas Medical Society, and the members of this society should stand solidly behind it and uphold the officers of the State Board of Health, and it is only in proportion to the earnest co-operation of each individual physician of the State that the work will be successful. In some instances the county judge declines or refuses to approve the appointee of the State Board for County Health Officer, in others, to provide any salary. This has prevented the proper execution of the duties of this office in these counties. Where the county judges have co-operated with the Board in preventing and controlling epidemic diseases, several of them have stated that it is the most economical policy of the county. Under the amended law, the State Registrar, with the assistance of the county judge, appoints the local registrars. When there is a vacancy, the county judge recommends the local registrar for the appointment and the State Regis-

trar shall appoint. I am informed that no county has made complete and accurate reports on births and deaths, as the first year was taken up in organization, and the second and third years in trying out the bill in the courts. All of the counties have made some reports. No provision was made for paying the registrars during the year 1916, but in many instances the judges allowed these claims. In a few instances the quorum court made the appropriations after the Supreme Court held that they could not be compelled to do so. Since the passage of the bill by the last Legislature providing for the payment of these statistics, I feel sure that the fees will be taken care of and vital statistics will be kept in such a manner that they will mean something to the State, provided doctors of the State will do their duty by reporting births and deaths willingly and promptly. Again I think we should all be more prompt in reporting notifiable diseases as set forth in the regulations as it is absolutely necessary to make early and complete reports on all epidemic diseases to the proper health authority in order to control the spread of such diseases.

Rural Health and Preventive Medicine.

The great English author, Benjamine Disraeli, very truly said: "Public health is the very foundation on which reposes the happiness of a people and a power of a country." Many years later, President Taft said: "It may well be claimed that the care of individual and family health is the first and most patriotic duty of a citizen." The legacy of health is the most valuable of all worldly possessions, and the cultivation of a strong, virile, able-bodied citizenship will endow a nation with the greatest asset which mankind can have.

In 1915 Congress appropriated more than five million dollars for the investigation and prevention of diseases of animal and plant life, and less than two million for the investigation and prevention of diseases of men. I would not reduce one cent of the appropriation for the conservation of animal and plant life, for it is a worthy thing to assist the agriculturist in every way possible, but I think it of far greater importance to throw every safeguard about the health of the man who is responsible for that livestock and vegetation. If we are to reap success in our present war it is necessary to begin at the fountain head and look well to the health and physical condition of our people, no matter how numerous and strong are our ships and fortifications, nor how many soldiers we have; they will be of little avail unless the men behind the guns are healthy, vigorous and capable of great exertion.

A large per cent of the population of Arkansas is rural and the problem of rural sanitation calls for consideration that of the possible danger of objectionable surroundings and unhygenic practices to the individual on the farm and to his immediate neighbors; and that of the menace which insanitary farm conditions may present indirectly to urban communities.

The sanitary relation of the farm to the city involves almost entirely the possibility of the spread of actual infection from the country to the city through milk, meat, vegetables and other farm products. A careful study of mortality statistics in the registration area of the United States shows that while there has been a decline in the death rate throughout the nation as a whole, that the death rate in the country has not fallen as rapidly as that in the urban districts. The remedy is the education of the public, through the medium of the written page giving instructions regarding the methods of conserving health. It is not only necessary that each citizen shall receive training in the ordinary curriculum of the arts and sciences but that he shall learn to conserve and care for the physical body, and it is necessary that the lesson shall be so thoroughly ingrained in the very essence of his nature that in time the maintenance of health and obedience to the rules of sanitation and hygiene shall become so much a matter of habit that they will be as automatically observed as are the rules of propriety and devotion. Some of you may think that after so much has been said and written by the United States Public Health Service, State Board of Health, newspapers, magazines, social welfare workers, etc., that this education is not needed. There you are mistaken, for those in the greatest need of this information, have it not. I think a committee should be appointed to prepare a pamphlet, in the simplest, briefest language possible, covering at least the Prevention of Typhoid Fever and Malaria and any other preventable diseases they may see proper, for distribution. They might be sent to Secretaries of County Medical Societies and they

in turn to the doctors who could and would distribute to the people in the greatest need thereof, in this way the cost would be slight. If this Society has not sufficient funds to pay for this, from a selfish motive alone it would pay every country doctor and some city doctors to contribute to such a fund, for you would save much time in decreased amount of charity work. "For God's Poor, the Devil's Poor and the Poor Devils," we always have to look after.

Every county health officer in this State who does not visit the rural schools of his county at least once a year and instruct them in preventative medicine should have his apponitment recalled and his pay withheld. Last but not least, let each of us do some individual missionary work. On one occasion I heard Mr. Bryan say that every man should devote a part of his time as a public duty in instructing the public in things pertaining to his particular profession that they might have profit thereby and the pleasure therein. So let us take a little time when the occasion offers and instruct those who need it most in preventative medicine.

Duties of a Doctor Outside of His Profession.

Within the profession and among the people there exists a prejudice against the doctor participating in any activities not involved in the routine of his daily labors. The fact is the doctor who knows nothing but medical science, who has no knowledge of the correlated branches of knowledge, can know but little of that science; the doctor who knows nothing about the social organism, nothing about the interdependence of the different elements of society, can know but little about his own profession as such; and finally, that doctor who is only a doctor, who is a mere doctor, cannot be much of a doctor.

I make this statement with the understanding that it applies to only a few yet to too many of our profession, for I believe that doctors realizing the general truth for which I am contending, cultivate something, religion, science, art, literature, legitimate sport or even politics, as a means by which consciously to broaden their intelligence, widen their humanity and extend their influence. I like to think of a doctor in his library where anatomy and art, therapeutics and theology, bacteriology and biography, where medicine and music are well intermingled, while alongside his dispensatory stands the United States Dispensation of Providence, otherwise known as the Constitution of our country. With his medicine journals come the literary magazines and the newspapers, from all of which he gleans the freshest thought and goes forth day by day with quickened step and cheerful countenance fulfilling in the largest measure the ideal of a doctor; or we may contemplate him at three o'clock in the morning, buttoning his coat as he is about to start home, pausing at the door to observe that in this advanced day, a Republic may be more easily born than a man, although in the former instances the after pains may be more serious. But this same doctor having manifested intelligence in many topics, other than medicine, and having thereby gained prestige for intelligence and sagacity, is the very man to say to his Representative or Senator, "The pending bill for increasing the power and scope of the State Board of Health is a good one; I hope you can see your way clear to vote for it and for the necessary appropriation to carry it into effect. Or, familiar with the qualifications of his neighbors, he is the very man to start a wholesome movement by saying to his patient, the merchant, or his friend, the farmer, or his colleague, the doctor, "I've watched Mr. A———'s course a long time; he is an intelligent fellow; of splendid integrity, knows the requirements of public life; do you not think that we had better send him to the Legislature?" Yes, doctor, but how are we to do it? is the usual reply—Talk it up; present it to the Union; see the party workers; go to the primaries, every one of us work for and secure his nomination; remember, the time to do the work is before the nomination, and remember to keep it up afterwards, replies the doctor, as he drives away to get his neighboring doctor, or still better his county medical society, to go to work along the same lines to the same end.

Business Side of Medicine.

I believe ours is a profession and not a trade, yet we know that the time has come in the history of this great profession when that doctor who is not a success financially is necessarily a failure as a doctor. The equipment of a doctor's office, fitting him self for practice and keeping himself fitted for practice, his journals, his books, his instruments, and his post graduate courses are so

important and so neeessary that unless he is able to keep abreast of the times, he not only suffers, but indireetly his patients suffer a great deal more than he does. The doetors ought to be the best supported men in the State, because they are the hardest worked men. The farmer, banker, merehant, goes home after his day's work to a night of rest; the busy doctor has no night of rest. The doetor should be the model man in his eommunity, a model man in his appearanee and eonduct—I thank God that the time for the drunken, swearing, dirty, vulgar doetor has passed forever; but regardless of remuneration, let us all be as good as we ean and do all the good we ean. I thank you.

DO YOU KNOW THAT

Under-paid fathers and over-worked mothers lose many ehildren?

The U. S. Publie Health Serviee issues free publieations on the eare of ehildren?

The infant mortality rate is the most sensitive index of eommunity intelligenee?

Dirty milk kills many babies?

One eighth of the ehildren born in the United States die before they are a year old?

Removing the eause before it beeomes a result is the best kind of publie health work?

Babies have a right to an offieially registered name?

The board bill for last year's babies was almost as great as the undertaker's bill for last year's babies?

Real estate is the soundest of all investments, provided due eare is exereised in the purehase. Never invest in anything at a distanee.—Buffalo M. J.

HOOK WORM DISEASES.

B. E. Washburn, Wilson, N. C. (Journal A. M. A., April 21, 1917), reports the results of experiments eondueted in the British eolony of Trinidad for determining the effieaey of thymol when administered in eapsule form with varying proportions of laetose and with sodium biearbonate. Each patient was given two treatments a week apart, and the bowel exeretions examined after the seeond. Preeautions were used to insure proper eonditions and different distriets seleeted for testing. The results are shown in a short table and show that thymol is much more effeetive when finely pulverized with an equal amount of laetose, but that there was a greater effeetiveness with biearbonate of soda. While the experiments are not extensive enough to absolutely prove the relative merits definitely, the soda and thymol eombination was superior. It is mueh less expensive than laetose, whieh means a great saving.

Dating of Biologic Products.—For the proteetion of the eonsumer as well as the manufaeturer, the Council on Pharmaey and Chemistry has adopted a rule requiring that serums and vaeeines and similar produets, to be aeeepted for New and Nonoffieial Remedies, must bear on each paekage the date of its manufaeture in addition to the date required by federal law. The praetice now followed by manufaeturers of plaeing on the eontainers of biologie produets the date beyond whieh these agents are not to be regarded as dependable (though in aeeordanee with the federal law) has not been satisfaetory. Exeept for diphtheria and tetanus antitoxin, in general there are no methods for determining the poteney of serums and vaeeines. At the present time, for the same material, one manufaeturer will fix an expiration date of four months, others one year or even eighteen months. Obviously this lack of uniformity is unfair to the manufaeturer who endeavors to supply a produet as fresh as is eommereially praetieable, and it also may lead the physieian to form a false opinion regarding the poteney of eertain biologie produets. The new rule of the eouneil will enable the physieian to know the age of a given produet when it reaehes him and will permit him to judge whether or not it has been kept unduly long. Moreover, it will prove not only helpful to the eonseientions manufaeturer and the physician, but will also safegnard the patient (Journal A. M. A., Mareh 3, 1917, p. 728).

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 Boyle Building,
Little Rock, Ark.

ADVERTISING RATES:
Upon request, a schedule of rates will be furnished.

ANONYMOUS COMMUNICATIONS.
Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

OUR PRESIDENT'S ADDRESS.

The annual president's address delivered by the retiring president, Dr. M. L. Norwood, is an admirable document which every member who did not attend the meeting should read, and which may be read again, with profit, by those who heard it delivered. There are matters in it to be carefully considered, the importance of which might escape attention in merely hearing it read. It will be found complete in the front section of this issue.

The Journal endorses Dr. Norwood's views touching the admission of undergraduates to membership in the society. As he points out, they are allowed to practice, and that of itself is the strongest argument for their admission to membership. Without it, and with the right to practice, they are as those being of us, but not with us. Refusing them membership, we are in the position of disapproving the law which permits them to practice and of which we members have ourselves been the beneficiaries. They are potential members eligible after graduation and examination; why not get them interested in the Medical Society at once? To admit the undergraduates can by no possibility hurt the society; on the contrary, it will be of benefit alike to the society and to the undergraduate. Many of our county societies lag for the lack of interest; probably the enthusiasm of these neglected practitioners may prove a very present help.

Dr. Norwood's ideas on co-operation of members in regard to legislation are irrefutable. Every member should subordinate individual ideas—and, perhaps we may add prejudices—to the will of the majority as expressed by the Committee on Legislation. We shall certainly never get anywhere so long as individual influence is brought to bear on the home members of the House and Senate by physicians instead of allowing the committee to pass final judgment. As Dr. Norwood points out, what is a legislator to think when a bill approved by the Medical Society's committee is opposed, wholly or in part, by a physician among his constituents? If a member of the society believes a certain law should be adopted, let him present his idea, not to his county member of the legislature or his district senator, but to his Legislative Committee of the State Society, and let them pull for it if the measure is a wise one, or reject it if the consensus of opinion is otherwise. Any other method only leads to confusion and retards or prevents the passage of suitable bills.

Dr. Norwood calls attention to Public Health Act No. 96 as a step in the right direction touching the appointment of registrars and of county health officers. He also points out that the law will be operative in full only by the co-operation of every physician in the state. Arkansas is behind the times in the matter of vital statistics. The state should be in the registration area, but, to the contrary, what laws we have touching the recording of births and deaths are not strictly enforced. The value of vital statistics, accurately kept, is understood more fully by every civilized country in the world excepting the United States, the proof being that after all these years of effort, only about two-thirds of the whole country is embraced in the registration area. When we find cities and communities in which the death rate apparently exceeds the birth rate, owing to the negligence of physicians in recording births, that city or county gets a black eye. Prospective immigrants first seek information as to the health conditions of the city or state to which they contemplate moving. They are scared clear away from any community making such a showing. The English law puts neglect to register births under the head of concealment of birth, a criminal offense to which the attending physician is made a party.

Dr. Norwood calls attention to the ever-present problem of rural sanitation and disease prevention. In one respect the Board of Health has had its hands notably strengthened by the appropriation of money to pay a hotel and restaurant inspector for the state at large. Heretofore enforcement of the requirements has been almost necessarily lax. It rested with the local health officer, who, in reporting violations of sanitary laws, made enemies in his practice in his own community. A state inspector has no such handicap and it is to be hoped that the law will be fully enforced hereafter.

The rural problem remains; that is to say, sanitation in the farming districts where there can be no adequate sewerage facilities and where ignorance, prejudice and diffidence are all factors preventing the general adoption of such expedients as might even measurably better conditions. Soil pollution is, of course, the chief evil and one that is extremely difficult of solution. It is difficult even to make a large proportion of the suburban population believe that the evil is a real menace, because the ways of their fathers are good enough for them and theories of communication of disease by germs are regarded as mere fancies and fads. Thus, as Dr. Norwood points out, the decline of the death rate in the cities is not accompanied by a corresponding decline in the rural death rate. Older countries, with infinitely more experience in such matters, also have this problem and have not solved it. A notable instance is that of the comparative death rate of London and England and Wales combined. While the death rate for the country at large is about fifteen that of London, the metropolis with all the handicaps of its slums, its poverty, its vice, crime and hard drinking, is only fourteen. The time-honored idea that health abides in the country and death and disease infest the cities, does not accord with the mortuary statistics. That typhoid especially, among other communicable diseases, is largely taken to the cities from the country, is undoubtedly true, so that the city dwellers have an immediate interest in solving this problem in rural sanitation and disease prevention. There is no immediate prospect of solving it, but we must keep everlastingly at it, and if we would all contribute the thought to it that Dr. Norwood has evidently given, that would be a distinct move in the right direction.

Meanwhile, we hope every member of the Arkansas Medical Society will take time to thoughtfully read Dr. Norwood's able address from end to end. It will prove worth the time expended.

Editorial Clippings.

MORE MEN FOR THE MEDICAL RESERVE CORPS.

It is evident that the local profession is not sufficiently impressed with the fact that we are engaged in a real war. Physicians are not applying for admission to the Medical Reserve Corps in any such proportion as the gravity of the situation demands. In the examinations held recently, the smaller cities of the state have furnished a much larger quota of medical men in proportion to the number of physicians than has Providence.

This is an unusual opportunity, especially for the younger men. It is a privilege to serve your country, and at the same time gain a remarkable experience. Volunteer army surgeons have always been men of mark, and have usually attributed their success in later life to the experience gained in military hospitals. But it is not of one's opportunities that we wish to speak. The country needs us, and we shall all be called upon to make some sacrifice before peace dawns upon a harassed world. If an army of 2,000,000 men is to be raised, more than 20,000 physicians will be needed. Throughout the entire country, only a small proportion of this number have signified their willingness to join the Medical Reserve Corps. Those who are in close touch with the authorities in Washington realize that the international situation is regarded as very serious. In case medical men do not apply for admission to the Medical Reserve Corps at a faster rate than they are doing at present, there is no doubt that a law will be passed which will mean practically conscription of eligible physicians.

"Is the spirit of '76 and '61 dead?" We do not believe it. The medical profession as a whole has never yet failed to rise to its opportunities. We are sure that the greatest crisis this country has ever seen will not find us wanting in a willingness to serve in any capacity where we can do the most good.—The Rhode Island Medical Journal.

Abstracts.

PRESIDENTIAL ADDRESS.

In his presidential address before the American Medical Association in New York, C. H. Mayo, Rochester, Minn. (Journal A. M. A., June 9, 1917), congratulated the audience on the position which the profession has gained in the world's affairs. Medicine has now become, he says, nearly an exact science, and the profession through its services in the present war has given it an opportunity to apply, wholesale as it were, the newer methods and to convince the public as to their value. The medical profession was the first to mobilize, and the government has honored it by giving it the first flag to be carried abroad. He discusses the objects and views as regards war which are held in this country and in England as compared with the German views, and then notices the governmental motives in civil organization as well, the measures that are being taken for the conservation of human life which are now recognized as a necessity, such as the care of the defectives and the sick, compulsory health insurance and the overseeing of education, as well as the mistakes that have been made in placing the wrong persons in power, etc. In reviewing the world's progress of the last hundred years, the part our country has played is manifest. Man's power to control the elements was first developed in America, and many of the greatest inventions that have promoted human welfare. He enumerates these and says that the medical profession has not stood as a body for that which is American in medicine, and many while abroad have been unduly apologetic and have depreciated the good we have done. Many important discoveries in medicine in America have had first to be appropriated by Teutons before they were accepted. Our country has done much for the advancement of medicine and his remarks on the higher standards of education which have rendered our graduates equal to those of any country and better than those of most, are just. He pays tribute to the excellent work of the National Board of Medical Examiners and mentions improvements which are still possible in some of the states. There should be nothing in the examinations of practitioners as to the method of treatment or separate board of examiners based on lines of treatment. Ultimately the public demand will require that all who practice the healing art should be tested on educational lines both general and special, the latter wholly on the knowledge of the facts of anatomy, histology, chemistry, sanitation, preventive medicine and the diagnosis of disease, but not on treatment, before permission is given to care for the lives and health of the people. The present cost of educating medical students is so great that it can be carried on only by richly endowed institutions. During past centuries medicine advanced slowly, but quite as rapidly as other lines of endeavor. The wonderful advance during the last century, and especially during the last fifty years, has given us a new world in thought and productive activity. While noticing the parts played by France, Great Britain and Germany, Mayo says that from a medical standpoint we must also be proud of our country and our great dead who have given an impetus to medicine which the world acknowledges. One hundred years ago the educated man could acquire the bulk of all that was known, but it is now commonly recognized that the world's knowledge is so extensive that the more general an education a man receives, the more hampered he may be also, unless he is highly educated in some particular line. It is proper to adjust education to man's requirements and the necessities of today. The graduating age of twenty-nine in medicine is four years too late, as the most productive and ideal period of thought is thereby limited to too short a time. In order that the physician may be graduated at the age of twenty-five, his vocation should be chosen in the seventh year of school life, and the eighth grade, the work of which is a review, should be eliminated. A revision of the time devoted to the study of the classics is necessary. By proper specializing in a six- or seven-year combined course of college and medicine, the student should be entitled to two degrees such as are now given in the University of Minnesota. "Medicine has been divided into many branches and, of necessity, diagnostic teamwork has developed, with the result that both the rich, who can pay, and the very poor, who cannot pay, secure the best possible service. To secure equally good service for the great bulk of the people, however, some change in diagnostic methods by the establishment of centralized plants, hospitals for diagnosis, or combinations of those engaged in specialties to care for the extraordinary cases, is necessary." The stimulus which war has given to the advance of medicine, directly and indirectly, is noticed, and instances of the progress given. The present war is of remarkable proportions and the medical science has as-

sumed an importance that it never had before. The requirements of our profession have been raised from within, not forced from without, and as a body no profession has more power than the medical one, if it will use it properly. Our country should secure a medical cabinet officer in the near future. We must aid in all that will elevate the general standard of the American citizen and conserve it; and in this connection he mentions prohibition, and says that it would be welcomed by our profession. Alcohol's only place now is in the arts and sciences. Among the agencies that have elevated America's reputation in the past, he mentions the progress of dentistry and the American nurse, who has distinctly elevated the nursing of the world and the care of the sick. "It is most fortunate that our army medical service is in the hands of three of our ablest men, Surgeons-General Gorgas, Braisted and Blue, and we must laud the work of the general medical council under the able directorship of Dr. Franklin Martin. The Journal of the American Medical Association, under the direction of Dr. George H. Simmons, has been an important factor in the education of the American physician."

Personals and News Items.

Dr. E. O. Day of Little Rock is attending the clinics in the East.

Dr. Sam J. Albright has moved from Kensett to West Point, Ark.

Dr. A. W. Strauss of Little Rock has returned from a visit to the clinics in Rochester and Chicago.

Have you asked yourself whether YOU ought to join the Army or Navy Reserve Corps?

The Journal would be greatly helped if its readers mention to advertisers that they are patronized because they advertise with us.

Dr. M. M. Norton of Lake Village closed his Lakeview Sanitarium from May 20 to June 10, while he attended the Medical and Surgical clinics in the East.

Dr. George Dock of St. Louis has received the French war cross and has been mentioned for his service in moving wounded soldiers under heavy bombardment while engaged in the American Field Ambulance Service.—Journal A. M. A.

The following Arkansas physicians attended the meeting of the American Medical Association in New York, June 4-8: William R. Bathurst, Robert Caldwell, C. P. Meriwether, Little Rock; John F. Rowland, W. T. Wooten, F. M. Williams, Hot Springs; F. L. Watson, C. R. Gray, Newport; M. M. Norton, Lake Village.

Arkansas physicians visiting in Little Rock during the past month include: Dr. L. Kirby, Harrison; F. E. Maguire, Gregory; J. M. Goodman, Sheridan; C. A. Archer, DeQueen; R. F. Strange, Booneville; J. P. Sheriff, De Luce; S. D. Kirkland, Van Buren, and C. S. Holt, Fort Smith.

Governor Brough recently reappointed Dr. O. D. Ward of England and Dr. T. J. Stout of Brinkley, members of the State Board of Medical Examiners, and Dr. Hugh Henry of Eagle Mills to succeed Dr. J. C. Wallis, Arkadelphia, who was ineligible for reappointment on account of having served two terms on the board.

The Journal takes this means of calling its readers' attention to the wholesomeness of gelatine and to the particular brand known as "Jiffy-Jell," an announcement of which appears in the advertising section of this issue. Read the advertisement and send for the "Test assortment" of Gelatine and the Receipe Book, mentioning your State Journal.

The State Medical Board of the Arkansas Medical Society recently met in Little Rock to reorganize. Officers for the next two years were elected as follows: President, Dr. F. T. Isbell of Horatio; secretary, Dr. T. J. Stout, Brinkley; treasurer, Dr. E. F. Ellis of Fayetteville. Other members present: Drs. J. A. Bogart, Forrest City; O. D. Ward, England; W. F. Smith, Little Rock, and H. H. Henry, Eagle Mills. The board adopted resolutions giving permission to graduate physicians who desire to enter the service of the army to be examined by the board at a date to be determined. Those who expect to take the examination should communicate with Dr. T. J. Stout of Brinkley, secretary of the board.

Letters to the Editor.

Editor, Journal Arkansas Medical Society, Little Rock, Ark.:

Dear Doctor—In the May number of The Journal you properly reported the action of the society with regard to Senator Kirby. You might have, without telling an untruth,

said L. Kirby alone voted against the first motion because he thought it political.

Now, without in any way questioning the patriotism of the Medical Society present at that meeting—for I know they are as clean a set of men as can be found anywhere—would not it have looked better if we had had three of that number who had enlisted in the U. S. Medical Reserve Corps, so Drs. Stone, Lowe and Dewey would not have been called from Springfield, Mo., to Fort Logan H. Roots to serve where Arkansas doctors could have served?

Fraternally,

LEONIDAS KIRBY.

PROCEEDINGS OF THE FORTY-FIRST ANNUAL SESSION OF THE Arkansas Medical Society

Little Rock, May 1, 2, 3, 1917

HOUSE OF DELEGATES.

TUESDAY, MAY 1.

Dr. M. L. Norwood, president, called the House of Delegates to order at 9:30 a. m.

Invocation by Rev. Sam H. Campbell, pastor of the Second Baptist Church of Little Rock:

O God, our Heavenly Father, we do thank Thee for this bright, beautiful day, and for this auspicious occasion, when this company of men shall come to this great city of ours from all parts of this great State of Arkansas; when they shall come together to discuss the work of the past year, and lay plans for the future. We thank, Thee, our Heavenly Father, that as they come they desire to have God's presence and God's blessings upon them. We thank Thee for their ministry of mercy and of love for the many that they have touched and blessed in the past. We recall, our Father, the days and hours when we ourselves needed the attention of skilled men like these, and how they came and ministered to us in our suffering and in our needs, and how Thou didst bless the efforts and bring relief to the suffering man. We thank Thee, our Heavenly Father, that Jesus Christ, the great Divine Physician, came into the world and ministered to the needs of man, who went about opening the eyes of the blind, unstopping the ears of the deaf and touching the fevered patients with his hand, and laying his healing hands upon the lepers and those that were in need. But He said, "If I go unto the Father, greater things than these shall I do." We realize that, because of the light and the knowledge and the power that He has brought into the world, these men have been able to do greater things, because they have studied every branch of science; they have studied anatomy; they have studied the needs of the physical man; and they have applied all the remedies that Thou hast given to us for the relief of suffering humanity, until they had their blind eyes opened, their deaf ears unstopped and their fever-burning bodies to be relieved. And, we pray, our Father, that Thou will continue to bless this company of men. O breathe upon them Thy spirit, Thy grace, Thy favor, and Thy love this morning; and grant that, in all the sessions of this convention, that Thou wilt so rule all things as to make it profitable for every man that he came up to this place. We pray that Thou wilt bless all the committees, and grant, our Father, that the work that is laid out, and the plans and the measures and all that are discussed may be so handled that every man will receive a benefit, and the great suffering thousands in the State may receive also a benefit from this convention. We pray Thy blessing to rest and abide upon each of us; help us to minister to the world, so that we shall glorify Thee. We ask it in Jesus' name, and for His sake. Amen.

President: We will have the address of welcome. Since Dr. Saxon, president of the Pulaski County Medical Society, is not here, Dr. Gibson has consented to deliver that address.

ADDRESS OF WELCOME.

Dr. L. P. Gibson, of Little Rock:

Mr. Chairman and Delegates:

It is convenient, they say, to have men who are too old for active service in the army to do duty at home, hand around things, wear badges, etc. I was conscripted as I came in the house. I mention that, because it is for your benefit. It is your good fortune that I did not have time to prepare a speech. I could have written something that would have kept you here for a considerable while.

Forty years ago this month, at Hot Springs, I attended the first meeting of the Arkansas Medical Society. Dr. Welch, the first president, died a short time ago. Since that time we have met all over the State, and many times in Little Rock, and it has always seemed to me that an address of welcome, when you met in Little Rock, was like sending an engraved invitation to your children and grandchildren to visit you at the week-end, or some other specified time. This is your home. This society was born here. It has wandered into the crooked paths of Arkansas, but has come back every year or two and gotten straight. I am satisfied that it will be easier to keep you straight at this meeting than at any that has ever been held in the history of the society. You may have a dry time, gentlemen, but dry farming is in vogue; not only in the soil, but in the human mind. It has been discovered that, by proper cultivation, you can make seeds sprout in the land, and in dry seasons, in communities like this, the human mind can sprout new ideas and develop old ones and grow and multiply means of relieving the sick, prolonging life, and so on.

But, we are glad to have you here. We will do all we can to make you have a jolly good time.

"Grape juice" diplomacy has played out in Washington, but it may be in vogue in Little Rock. Dr. Welch, whose name I mentioned a short time ago, adds a sad chapter to the history of our society. As I said, he was the first president. He had attended a meeting of the American Medical Association at Philadelphia in 1876, and in his presidential address at Hot Springs he said that probably no meeting in the history of the American Medical Association had been so barren of results as the one at Philadelphia during the Centennial; there were so many distractions in the way of the Centennial Exposition, and theatrical and intellectual attractions of every kind, that it was almost impossible to get a quorum to transact the

business of the Association. I was elected assistant secretary at Hot Springs. Dr. Hooper, to whom Dr. Welch handed his address for corrections, said, "It will never do in the world to let that thing go before the American Medical Association, whenever we should have any case before them. So, we will just change that." So, he changed it this way: "Notwithstanding the many distractions during the meeting of the American Medical Association in Philadelphia, probably no meeting of that Association ever resulted in **such good** to the medical profession!" That was diplomacy.

We have had a fight on our hands before the medical association, but, notwithstanding conditions which have been imposed upon us by the rural districts and you fellows from the backwoods, we hope this meeting will be one of the best and pleasantest you have ever had, and that you will not have to stray to Missouri or to Illinois or to El Dorado or Fayetteville or Batesville, or even to Texarkana or to Hot Springs for a good time. (Applause.)

President: I will appoint W. V. Laws, of Hot Springs, W. H. Toland, of Nashville, and F. T. Isbell, of Horatio, on the Credentials Committee.

REPORT OF CREDENTIALS COMMITTEE.

Dr. Laws: The Credentials Committee reports that they have investigated the credentials in the hands of the secretary, and find them all satisfactory, and advise that the delegates be seated as reported by the secretary.

President: I don't suppose it is necessary to have a motion. It will be received.

The secretary called the roll, and a quorum was present.

President: I will appoint Dr. E. F. Ellis, of Fayetteville, Dr. St. Cloud Cooper, of Fort Smith, and Dr. T. F. Kittrell, of Texarkana, on the Reference Committee.

It is not on the program as such, but I have been requested to appoint a Committee on Constitution and By-laws, as perhaps there would be a good many changes made. I will announce that committee in a little while.

Dr. H. H. Rightor, of Helena: I move that the reading of the minutes be dispensed with, since they are in the proceedings.

President: Unless there are some changes, and as most of you are familiar with them, a motion is in order to dispense with the reading of the minutes. (Motion carried.)

President: As the President's Address is now on the program, I am going to follow the example of my immediate predecessor and combine it all in one, and have the president's address to the House of Delegates and to the General Session at the same time this afternoon.

REPORT OF COMMITTEE ON SCIENTIFIC PROGRAM.

Secretary:

I believe I have the report of the committee. It is over in the office. It's a very small and limited report. I will state this: that we have decided this year to try a new feature in getting up our program, and that was to limit all papers to members of the Arkansas Medical Society, and not ask any visitors, as we have done heretofore. Kentucky tried this last year, and they tell us they have had the best meeting they ever held. Dr. Bathurst had an editorial in The Journal several months ago calling the attention of the members to this feature, requesting anyone who opposed it to let us know. We had no one to oppose it, but received a great many letters from men over the State, saying they thought it would be a good feature, and about the only opposition we have had has been in the last few days; but don't think that was of a very serious nature. That's about all the report that the committee has to make.

Dr. J. G. Eberle, of Fort Smith: It may be a little out of order, but I don't want to offer anything in the way of criticism of the position the president has taken. I just want to say I don't believe it is proper for the president to combine the address to the House of Delegates and the address to the General Session in one address. As I understand it, the duties of the House of Delegates pertain to the business end of the Society, and those business matters should be laid before the House of Delegates. And, probably before the General Session, he can wander over the whole field of medicine at his own will. Now, it may be late to ask the president to divide his address in that way, but I just want to offer a mild protest against that being set as a precedent to be followed in the future. There are some important matters that ought to be taken up by the House of Delegates. You just mentioned, Mr. President, that there will be some changes in the Constitution. Your recommendations to the House of Delegatse along that line will be valuable. It has been admitted that there will be some recommendations made by the committee on expert evidence. That ought to come before the House of Delegates, and not before the General Session. Your recommendations along that line would be of value to the House of Delegates, and it would not be proper to come before the General Session, because they could take no action on it. I merely mention these things because I want to prevent this precedent from being followed in the future.

President: I will just state to the House of Delegates that I do not recall separate addresses being prepared but by two presidents in the last several years. I may be mistaken. Technically Dr. Eberle is right, and I accept his protest good naturedly. If the House of Delegates convened at the same time that some of the sessions convened, and were in conflict with each other, I think it would be eminently correct to follow that out. But, the House of Delegates for the last few years of the Arkansas Medical Society has never been in session at the same time as that of the General Session. For that reason I could see no benefit in separating them; and that is the reason why it was done this time. If the scientific section was going on at the same time that the House of Delegates was going on, it would be eminently proper for them not to come together. But, the House of Delegates and the General Session never conflict with each other. They virtually have the same audience at all times, and that is the reason why. However, had I known this would have been requested, I would have separated them.

The report of this committee will be referred to the Reference Committee.

REPORT OF LEGISLATIVE COMMITTEE.

To the President and Members of Arkansas Medical Society:

Your Committee on Medical Legislation beg leave to report as follows: At the last State meeting at Texarkana a resolution was passed instructing this committee to ask for change in time of meeting of State Examining Board, and a bill to make effective the collection of Vital Statistics.

A meeting of this committee was called for December 15, 1916, at Little Rock, at which time we tried to communicate with State Board of Health through State Health Officer who was out of the city at that time and I later communicated with him by letter, he answered saying that a bill was being drafted and that as soon as completed he would furnish this committee with a copy, which he failed to do. I also asked him for further information on this bill which he failed to answer, and the bill was introduced by the State Health Officer without reference to or knowledge of this committee.

I talked with one member of State Examining Board and wrote to the President of that Board in regard to the change of meeting time and was informed later by a member of this committee that a bill had been drawn by a member of State Board and given to a member of the Legislature for introduction, while we had waited for action, so much time had elapsed, that notwithstanding, we got introduced and passed by Senate, it died on Calendar of the House.

It is the opinion of the committee the reason this as all other measures that failed to pass is lack of co-operation by the individual or set of individuals introducing legislation independent of your Committee on Medical Legislation, and we recommend hereafter that all legisla-

tion pertaining to organized medicine be presented to that committee before organization of Legislature.

C. A. ARCHER, Chairman.

(Reports of committees on Board of Visitors to the Medical Department of the University of Arkansas, and Necrology were passed.)

REPORT OF COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION.

Dr. H. H. Rightor, of Helena: I am the only member of the committee here. I have not any report to make. Dr. Shinault wrote to me and Dr. Fink, the other member of that committee, stating that, on account of his poor state of health, he would not be able to act as chairman of that committee, and asked Dr. Fink to act in his stead; and Dr. Fink told me the other day he had not done anything as yet. Probably we will get in a report before the meeting adjourns. We ask a little more time.

President: We will ask you to submit that report in writing, whatever it is, one way or the other, before the meeting adjourns.

REPORT OF COMMITTEE ON SANITATION AND PUBLIC HYGIENE.

Dr. J. S. Wood, of Hot Springs: We haven't held a meeting.

REPORT OF COMMITTEE ON CANCER RESEARCH.

President: That has already been published in the last issue of The Journal. If any of you have not read it, and have to have it read, the secretary will read it at the next meeting of the House of Delegates. I presume, however, that all of you have read it.

(Report of Committee on First Aid passed.)

REPORT OF COMMITTEE ON INFANT WELFARE.

President: That, like the report of the Committee on Cancer Research, has been published in The Journal. If Dr. Mahoney is present and cares to read that report, we will be glad to have it read. The report of the Committee on Infant Welfare and on Cancer Research have both been previously published in The Journal, and the secretary has them. I presume you have all read them.

REPORT OF COMMITTEE ON HISTORY OF THE ARKANSAS MEDICAL SOCIETY.

Dr. L. P. Gibson, of Little Rock: I have practically done nothing in the way of a history of the Arkansas Medical Society. I have the documents. I have gone through them, and I have located salient points in the history. If I do not do it in the present year, I will leave it to my youngest successor, Dr. Eberle or Dr. Cargile or Dr. Kirby. But, the history will not be lost. I have practically done nothing in the way of writing it. In fact, I don't exactly feel that way now.

REPORT OF COMMITTEE ON MEMORIAL TABLET IN MEMORY OF THE LATE DR. JOHN S. SHIBLEY.

Mr. President:

As chairman of the committee appointed to have placed in the Arkansas Tuberculosis Sanatorium a bronze memorial tablet to the late Dr. J. S. Shibley, a member of this Society and the first superintendent of the sanatorium, I beg leave to submit the following report:

The tablet was designed and made by the Gorham Company of New York. Its dimensions are 30x20 inches and the work was sculptured. The cost was two hundred dollars. It was placed in the hall on the wall under the main stairway.

The following is the inscription:

THE ARKANSAS TUBERCULOSIS SANATORIUM.

This Tablet Erected 1916 By The Arkansas Medical Society To Commemorate The Beneficent And Successful Work Of Our Late Member And Sometime President

JOHN S. SHIBLEY, M. D.

He Was Foremost In Establishing This Institution And Was Its First Superintendent.

A photograph of the tablet is hereto attached. (See Fig. 1.)

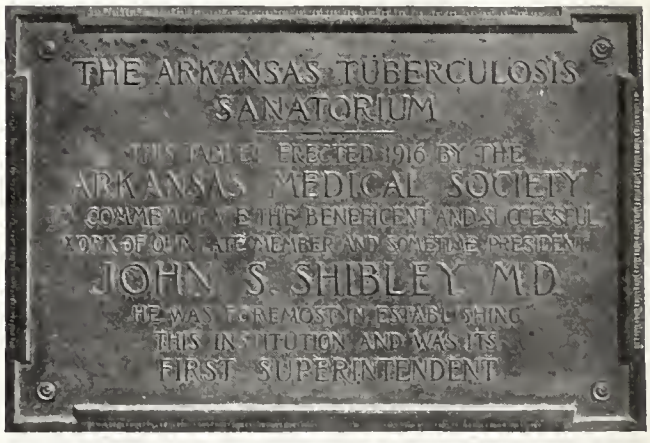


Fig. 1

During the meeting of the District Society the memorial was unveiled on the 19th day of September, 1916. Dr. J. G. Eberle of Fort Smith, a member of the committee, was designated by the chairman to make the dedicatory address on behalf the State Medical Society, but he was unavoidably absent and requested Dr. J. T. Clegg of Siloam Springs to perform the service for him which he admirably did.

The chairman of the committee, the only member who attended the unveiling exercises, asks the privilege of this personal addendum to the foregoing official report:

The nineteenth day of September, 1916, was a rather warm day in the valleys and lowlands of our State, but it was a very clear day with the sky unusually blue, and the gentle breezes of the lower lands became brisk and bracing when they charged and captured the ridges and hill-tops which characterize the beautiful landscape in which is situated, and which surrounds as far as eye can see, the Arkansas Tuberculosis Sanatorium.

God, who made the country, seems to have prepared this plot of mother earth for the very purpose for which man who makes the town has selected it.

The Appalachians may have higher hills and deeper valleys; the majestic Rockies may have sublimer peaks and grander canyons, but certainly between these two vast mountain range in the entire Mississippi Valley eye of man hath not seen a pastoral land of such surpassing loveliness and ear hath not heard zephyrs gentler or breezes more soothing.

It is indeed a place where angels fold their wings and rest, in this Eden of the West of Arkansas.

Mohammedans have for hundreds of years made weary pilgrimages to Mecca and strewn the pathways of their journeyings with disease and dead men's bones, to visit the seat of their prophet, but few of the christian peoples of our own State have the least knowledge or slightest idea of this beneficent site of this humble fortress suituated on the hills near Booneville, dedicated to battle against the great white plague, to offer to the sufferers from tuberculosis the scientific professional treatment and kindly, benevolent instruction and watchful care of a haven of peace, of contentment, of hope.

If even one representative man and one representative woman from each community in our State would visit the Arkansas Tuberculosis Sanatorium one time; if each prospective member of our Legislature would visit this institution just one time with an open mind and a pure heart, never again would the trustees of this noble institution have to hold out their hand in begging attitude before the doors of the houses where our Legislature meets and by supplication obtain the meager appropriations only to have them reduced by proclamation after the Legislature has adjourned.

I had rather deserve this simple tablet placed by my medical colleagues on the wall of the Arkansas Tuberculosis Sanatorium than to be the hero of the battle of the Marne or the leader under the stars and stripes of a division of patriotic American soldiers through sunny France to do battle for "Dieu et mon droit."

REPORT OF COMMITTEE ON MEDICAL EXPERT TESTIMONY.

Dr. Gibson: When I introduced this resolution at Texarkana, I thought that a great good might be done before the legislature, in conjunction with a like committee from the Arkansas Bar Association. Upon my return, and from investigation and taking the views of attorneys, counsellors, solicitors, lawyers and jurists, I ascertained that we could really do nothing with the present Constitution of Arkansas. Therefore, I wish to apologize for it now. I did not notify the other members of the committee. We took no action. But, I recommended that a committee, not this committee, be continued, to act in conjunction with a similar committee from the Arkansas Bar Association before the Constitutional Convention which meets this year, and we may be able to accomplish something there. Prominent lawyers informed me that it would be either unconstitutional or, if it was constitutional, it could be declared unconstitutional by our supreme court. So, under the circumstances, I really did not ask the committee to meet, and we have done nothing, in view of having the committee continued and working before the Constitutional Convention. I believe there will be some physicians in that body, and, if they will devote their time to the welfare of the people through the medical profession, I think that some good can be accomplished. Anyhow, I was advised that it would be useless to have a law passed before the Constitution was changed.

President: The report of the Chairman of the Council is the next order of business.

Dr. J. T. Clegg, of Siloam Springs: The Council has no report to make just at this time, but ask further time to make it.

President: Without objection, the Council will be given further time.

(Report of the delegates to the A. M. A. was passed.)

REPORT OF THE SECRETARY.

To the President and Members of the House of Delegates of the Arkansas Medical Society:

I herewith beg leave to submit the following report:

As you are well aware, there still exists four counties in the State in which we have never been able to organize a county society: Van Buren, Stone, Newton and Scott.

The following counties had a society which only existed one year after we had sent an organizer into them, and succeeded in orgauizing a Society: Fulton, Izard, Sharp, Pike, Marion and Cleburne.

Randolph and Montgomery Counties failed to pay their dues for 1916. I am glad to say, however, that Randolph has reorganized and paid its dues for 1917.

Johnson, Pope, Union and Garland have failed to pay their dues for 1917. So, this gives us fifteen in the State that at present are not members of our Society. I think, however, Johnson, Pope, Union and Garland will pay their dues probably before this report is read.

At our last annual meeting we had a membership of 830 paid up. I am glad to say that this year we have a membership of 880, or 50 in excess of our last report.

There seems to be very little or no enthusiasm in a majority of the county societies. A great many have failed to meet for months, and others only meet two or three times a year. The county secretaries have been slow in making their reports. The most unfortunate thing with the majority of the county societies is that they change their secretaries practically every year, and when I mail to the county secretaries, in November, a full supply of blanks for their annual report, they fail to turn them over to the secretary-elect. It has been my custom in sending out the blanks to the secretaries to write them a letter with instructions as to how and when to make their report, and if this is not turned over to the new secretary, we fail to get any report until some of the older members begin to make inquiry and "spur" him up; and then the new secretary writes in four or five weeks prior to the time set for the annual meeting, requesting that he be sent the proper blanks and instructions for making his report.

I beileve that each member of the House of Delegates will be gratified to know of our financial condition.

We had on hand at our last report	$5,434.88
Vouchers drawn on the treasurer since our last meeting, which includes the entire expense of running the Society and Journal	3,408.54
This leaves a balance in the hands of the treasurer of	$2,026.34
$2,000.00 of this has been drawing 4 per cent interest, which amounts to	74.80
	$2,101.14
I have received since our last report for dues for 1916, paid after our annual meeting	$ 426.50
Received for dues for 1917	2,189.00
Received from the editor of The Journal for advertisements	1,837.98
Making a total received since the last annual meeting of	$4,453.48
With the balance in the hands of our treasurer	2,101.14
Totals	$6,554.62

Which gives us $6,554.62 on hand, with a possible outstanding indebtedness of $250.00.

Respectfully submitted,
C. P. MERIWETHER, Secretary.

REPORT OF THE TREASURER.

To the President and Members of the House of Delegates of the Arkansas Medical Society:

I wish to make the following report, from May 1, 1916, to May 1, 1917:

RECEIPTS.

Balance on hand	$1,392.43	
From secretary, May, 1916	4,042.45	
Interest on $2,000.00 to date	74.80	$5,509.68

DISBURSEMENTS.

(Per list attached)	$3,408.54	
Balance on hand	2,101.14	$5,509.68

DISBURSEMENTS, 1916-1917.

Voucher No. 424.	Wm. R. Bathurst	$ 10.00
Voucher No. 425.	Wm. R. Bathurst	656.85
Voucher No. 426.	C. P. Meriwether	705.95
Voucher No. 427.	W. A. Snodgrass	18.45
Voucher No. 428.	H. H. Rightor	3.00
Voucher No. 429.	L. T. Evans	10.00
Voucher No. 430.	F. S. Overton	52.60
Voucher No. 431.	Southern Printing Company	4.25
Voucher No. 432.	Noel Loeb	97.70
Voucher No. 433.	Central Printing Company	100.25
Voucher No. 434.	Sonthern Printing Company	7.50
Voucher No. 436.	Central Printing Company	201.98
Voucher No. 437.	Central Printing Company	149.70
Voucher No. 438.	Chas. L. Thompson	200.00
Voucher No. 439.	Geo. B. Fletcher	5.00
Voucher No. 440.	Wm. E. Bell	25.00
Voucher No. 441.	Parkin-Longley Company	4.00
Voucher No. 442.	Wm. R. Bathurst	10.00
Voucher No. 443.	Central Printing Company	138.65
Voucher No. 444.	Central Printing Company	145.06
Voucher No. 445.	Central Printing Company	162.03
Voucher No. 446.	Central Printing Company	112.63
Voucher No. 447.	Wm. R. Bathurst	10.00
Voucher No. 448.	Central Printing Company	156.61
Voucher No. 449.	Central Printing Company	129.28
Voucher No. 450.	Wm. R. Bathurst	11.00
Voucher No. 451.	Central Printing Company	138.54
Voucher No. 452.	Central Printing Company	142.51
		$3,408.54

Respectfully submitted,
WM. R. BATHURST, Treasurer.

Communications were here read.

Secretary: This communication was received a short time ago from the American Medical Association in compliance with a resolution that was passed at the Detroit meeting:

535 North Dearborn Street, Chicago, Feb. 5, 1917.

Dr. C. P. Meriwether, Sec'y,
Arkansas Medical Society,
Little Rock, Arkansas.

Dear Doctor Meriwether:

The American Medical Association employs field men to look after subscriptions and fellowship matters. The reports from these men, as well as from other sources,

convince us that cooperation with the component State association can be conducted with mutual advantage.

Accordingly, the Association selected certaiu salesmen (designating them organizers) to try out such a plan as follows: The organizer is provided with a list of the physicians of each county. This list is checked with the records at this office to indicate the physicians who are members of the State organization, and whether Fellows of the American Medical Association, or subscribers for The Journal. With this data in his possession, the organizer is sent to the secretary of the State association in the State in which the work is to be done. The organizer visits the secretary of the State associatiou in order that the two may mutually understand each other; that the organizer may benefit from such advice aud suggestions concerning the work as the secretary may wish to give, and that the secretary may see at first hand the general directions and the data furnished from the American Medical Association headquarters. If possible, the organizer then will go directly to the councilor in the district assigned, discuss the local situation with him, and obtain his cooperation if possible. The organizer next reports to the secretary of the county society in which he is to start work, and enlists the cooperation of local officers and members. Sometimes the foregoing procedure, in all its details, is not practicable, but in any case, after leaving the State secretary, the organizer reports to the secretary of the first county society as he enters his district, and arranges to confer with the councilor as soon as possible.

The organizer checks over the list of non-members in the county and arranges to call on ouly those who are adjudged "acceptable" by the officer or by members of the local society. He calls on each of these non-members who can be found, and explains the advantages of the organization, and endeavors to obtain an application for membership from this non-affiliated physician, together with a deposit for the dues, when this collection is agreeable, and transmits the applications and the money collected to the local secretary, reporting each week to the State secretary and to this office. He also makes reports on the conditions affecting the organiaztion, as he sees them, in each county and district. In addition to this, he seeks to increase the Fellowship in the American Medical Association wherever possible, and is privileged to solicit orders for subscriptions for The Journal.

For this work, the Americau Medical Association provides a modest traveling allowance and a nominal salary, and in addition a coumission for new subscriptions for The Journal. The State society, cooperating in this plan, is asked to pay the organizer one dollar ($1.00) for each member who qualifies after being elected on an application taken by the organizer.

The success of this plan depends iu great measure on the local officials, whose cooperation with the organizer is essential.

Certain men have developed special ability for this work. They work carefully, thoroughly and systematically, being governed, of course, by the local conditions and the time and expense required. This plan has produced good results in a number of States, and we submit it to you, believing that your State Society might like to join in such work.

Will you kindly let us know if it is agreeable to you to cooperate on this basis, iu order that we may discuss further details, and that we may be advised of your present opinion on this subject.

Yours truly,
AMERICAN MEDICAL ASSOCIATION,
Alex R. Craig, Secretary.

Little Rock, February 12, 1917.

Dr. Alex R. Craig, Sec'y,
American Medical Association,
Chicago, Ill.

My Dear Doctor Craig:

In reply to your commuuication of February 5th, would state that personally I am heartily in accord with your plau for placing men in the field to secure subscriptions and fellowship for the A. M. A., and also to act as a State Organizer. I am sure that it will meet with a hearty approval of our State Society, and I will be only too glad to bring this matter up at our annual meeting.

I don't know whether under our Constitution and Bylaws that the Council would have power to act; still should they do so in this matter, I am almost sure that the House of Delegates would approve of their actiou.

Our next annual meeting will be held in Little Rock May 1st, 2nd and 3rd, and if anything definite has been arranged in regard to this matter, will be only too glad to bring it before the House of Delegates.

With kindest personal wishes, I am

Yours very truly.
C. P. MERIWETHER, Secretary.

President: You have heard the reading of this communication. What is your pleasure? Shall it be referred to the Council like all other reports, or do you want a special committee? If there is no objection, I presume it shall be refered to the Council.

President: The next order of business is Memorials and Resolutions.

Dr. H. H. Rightor, of Helena: I have no resolution to offer. I would like to suggest that the president appoint a committee to draft a resolution that we send to the man who, I think, misrepresents us in Congress, Senator Kirby, expressing our hearty disapproval of the way he is now acting in Congress, and asking that he try a little harder to represent the people of the State of Arkansas rather than to do what he thinks. I think it would be a good idea if we could get up a resolution and send to him, and spread it on the minutes of this Society, expressing our disapproval of his action, and asking him to uphold the President of the United States. (Applause.)

Dr. L. Kirby, of Harrison: My name is Kirby. I am opposed to Kirby and his conduct in the Senate of the United States; but I do not believe that the Medical Society of Arkansas ought to get into politics. But, if this was anything else but the Medical Society, I would vote for the resolution at once. (Applause.)

Dr. Earle H. Hunt, of Clarksville: I want to second Dr. Rightor's motion. I offer an amendment, that we ask Senator Kirby to resign. (Applause.) Seconded.

Dr. C. H. Cargile, of Bentonville: I disagree with Dr. Kirby's construction of this. This is not politics, this is patriotism. (Applause.)

President: There has been a motion, made and seconded, if I understand it correctly, that the chair appoint a committee of three to draft resolutions to be submitted to this body for adoption or rejection, relative to the course Senator Kirby is pursuing in the Senate of the United States. It is now open for discussion. Do you desire to be heard on the question? (Cries of "Question.")

Motion carried.

President: How many do you want on that committee?

Dr. Rightor: Three.

President: I will appoint Dr. Rightor, Dr. Cargile and Dr. Earle Hunt on that committee.

Dr. W. V. Laws, of Hot Springs: Along this line, if I am not out of order, I think it would be well for the State Society to pass this resolution that was published in The Journal of the A. M. A. week before last, a resolution that was adopted by the Chicago Medical Society and the St. Louis Medical Society, relating to the abolition of the patents on salvarsan. I would like to introduce that resolution. I did not have time to get it typewritten, but it is a copy of the resolution you are all familiar with, because it was published in the A. M. A. Journal week before last, April 21st, to memorialize Congress to abolish the patents on salvarsan.

President: That's in order, all right.

RESOLUTION.

"Whereas, Salvarsan is a drug which is of vital importance to the protection of health and to the saving of life; and

"Whereas, The patent rights conferred on salvarsan and its congeners have created a monopoly which has permitted a price to be placed on the drug which makes it unavailable to tens of thousands of indigent sick in this country; and

"Whereas, The drug has hitherto been supplied to this country from foreigu shores and the supply during the war has been uncertain, and insufficient; and

"Whereas, The patents have prevented the preparation and distribution of the drug in this country by American laboratories; and

"Whereas, The patents conferred are operating against the health interests and the public welfare of this country; therefore be it

"Resolved, By the Arkansas Medical Society that Congress be earnestly urged to abolish the patents on salvarsan and its closely related products."

I move its adoption. Seconded. Carried.

President: I will appoint on the Committee on Constitution and By-laws Dr. J. T. Clegg as chairman, Dr. H. H. Rightor and Dr .W. R. Bathurst.

The following members were selected as the Nominating Committee:

NOMINATING COMMITTEE.

First Councilor District—Dr. J. C. Hughes, of Walnut Ridge.

Second Councilor District—Dr. L. T. Evans, of Mount Pleasant.

Third Councilor District—Dr. Phil E. Thomas, Jr., of Clarendon.

Fourth Councilor District—Dr. E. E. Barlow, of Dermott.

Fifth Councilor District—Dr. F. O. Mahoney, of El Dorado.

Sixth Councilor District—Dr. J. E. Cannon, of Hope.

Seventh Councilor District—Dr. W. V. Laws, of Hot Springs.

Eighth Councilor District—Dr. C. R. Doyne, of Little Rock.

Ninth Councilor District—Dr. J. E. Phillips, of Eureka Springs.

Tenth Councilor District—Dr. J. G. Eberle, of Fort Smith.

President: The selection of the names to be recommended to the Governor for appointment on the State Board of Medical Examiners is next.

Dr. Rightor: Inasmuch as it is rather early in the meeting, and all the trains are not in yet, I move that this be postponed until some time in the afternoon session, probably after the president's address.

President: There is always a little politics about this business. Nobody can say anybody is taking advantage of any one. I suggest you designate some particular time.

Dr. Rightor: Say, after the president's address.

President: At the General Session?

Dr. Rightor: Yes.

Dr. Bathurst: I second the motion, and that a recess be given immediately after the president's address for the selection of these members. Carried.

Dr. H. Thibault, of Scotts: What members are to be elected?

President: There are four to be selected.

Secretary: The names of the members who go off of the Board are Dr. T. J. Stout, Dr. J. C. Wallis, Dr. T. F. Ellis and Dr. O. D. Ward.

On motion, the House of Delegates adjourned.

GENERAL SESSION.

Tuesday, May 1, 2:30 P. M.

Dr. M. L. Norwood, president, called the General Session to order.

Invocation by Rev. Roscoe Stapp, of Mena, Ark.:

Our Heavenly Father, we thank Thee for the privilege of deliberation. We thank Thee for the privilege of gathering ourselves together to discuss vital questions. As we come together this afternoon, we pray that Thy presence may rest upon us and enlighten us. We pray, our Heavenly Father, that as we come together we may understand that we are together for a purpose; that is, to uplift humanity; that is to carry out the principles that are not enirely of man but of heaven As we come together this afternoon, our Heavenly Father, we pray that Thou would make us to realize that men and women are banded together for one supreme purpose, and that purpose is Service. We pray, our Heavenly Father, that Thou would make us to understand that the man who is the best man, and the woman who is the best woman, is that man and that woman who are willing to dedicate their lives in whatever way God leads them. We pray, our Heavenly Father, that Thou will be with these men this afternoon as they discuss vital questions in their profession. We pray that Thou wouldst help them to understand that it is their business to get together. We pray that Thou will make them to understand that the man who is dead is the man who owes nothing; but to understand that every man who is living is an I. O. U. O, our Father, make us to understand these facts. Be Thou in these deliberations. Help these men to get out of this very body this afternoon just exactly what they ought to get; that they may understand that their duty to mankind is not so much human, but is divine. We pray that Thou wilt be behind the officers as they preside. Give them wisdom, and protect them. And, may Thy Spirit and Thy Name be glorified. We ask it in Jesus' name, and for His holy sake. Ameu.

ADDRESS OF WELCOME.

Mayor Chas. E. Taylor:

Mr. President, and Members of the Arkansas State Medical Society, Ladies and Gentlemen:

I am delighted, on behalf of our people of the Capital City of the State, to say to you that we welcome you right heartily to our midst at this time. We are always delighted to see you individually and collectively. But, at this time, in the world's history, when conditions are such that men and women are serious-minded, when they are thinking of the great problems that confront us because of the fact that our nation is involved in a world war, it is fitting and proper that those who temporarily at least occupy official positions, such as the present speaker, should come to you, with the burden of his citizenship upon him, and say to you, as men and women qualified to advise, from your technical and from your professional experience, some things that occur to him, wherein, in his judgment, you can be of help and of assistance to the people of the State of Arkansas.

It is not my purpose to make a patriotic address. That is not necessary to this band of American men and women, whose very blood tingles with the thought of patriotic themes. It is rather my purpose to come to you as a plain man, speaking of problems which have come under his observation, and speaking of things that he thinks you can help in. I am coming directly to the point, because I realize how valuable your time is. Any man who has paid a doctor's bill realizes how valuable is the time of medical men. (Laughter and applause.)

Efforts are being made by the Buisness Men's League, by the city government, and by the State government, to secure at the Capital City of the State the location, not only of an officers' training camp—that has been assured, and that will bring here at Fort Logan H. Roots possibly 3500 young men and older ones seeking to serve their country in the capacity of officers, willing to give their time to be trained as such,—but efforts have been made with the authorities at Washington, which, I am informed, would indicate that there is much more than a possibility, that there is even more than a probability, that there is a great likelihood, to be emphatic about it, that a division training camp will be located within the immediate vicinity of this city, bringing to this city more than 28,000 enlisted men for further training in the arts of war.

As conditions are at present, it is very likely, and it is probable, that these men will be stationed here some time. And, I have thought, as a public official, of the initial problem their coming brings to us. Not of police protection, because these loyal young fellows, many of them citizens of the State of Arkansas, and of our sister States, will not be violators of the law, except for some minor offenses; but, because there brings to the city of Little Rock and the people of the State of Arkansas the consideration of the problem that confronts the medical men, that confronts men who believe in keeping the integrity of the men and the women of the community pure, men who believe in proper education, in certain enlightenment, so that these men who come may have the benefit of the advice of men and women who have had the experience which has qualified them to advise.

Therefore, without any apology, I am going to call your attention to some few items which have come under my observation, which I have culled and brought together, which I am going to read, with your kind permission, taking only three or four minutes. Then, I am going to make a suggestion to this august and honorable body.

I refer, ladies and gentlemen, briefly to the fact that the presence of great bodies of men will bring up in your minds and in the minds of the officials the fact that these men do not always know how to take care of themselves; especially as regards venereal diseases. In the city of Little Rock we have made some effort to tackle this proposition. We have succeeded to a very considerable degree. The effort has been sincerely made. It was made with a desire to be of help. It was made in spite of the charge, "That's an age-old problem. It cannot be handled by us. No one else has attempted it." It was made with the desire to step a little bit farther than some other communities had stepped. And it is on the city of Little Rock, in company with fourteen other cities of the United States, to take an advanced stand. I refer to the endeavor towards the absolute suppression of prostitution in the city of Little Rock.

Now, the presence of 28,000 men more is going to bring a great problem to your midst. Your mind will probably be appalled at the size of it. And, yet, you men here, possibly every one of you, know enough from your professional experience to go to some of those men and tell them things that will help them, and that will enable the American soldier to avoid the catastrophe that has come to the European armies of whatever nation.

The experience of European countries has shown that prostitution is one of the most serious, if not the most serious of army problems.

Quoting from Dr. M. J. Exner, in his work on Social Hygiene, Vol. 3, page 43:

"During the first eighteen months of the present war, one of the great powers had more men incapacitated for service by venereal disease contracted in the mobilization camps than all those fighting at the front."

And, from The Journal of the American Medical Association:

"The number of syphilitics in the army must certainly be several hundreds of thousands. Since the war began a total equivalent of sixty divisions have been temporarily withdrawn from the fighting for venereal diseases." That is in the report of the Austrian army; sixty divisions. If they were American divisions, it would mean about 1,600,000 men; nearly two millions of men.

From The Shield, printed in London last month, Sir Arthur Conan Doyle asked in writing of the London Times on February 6th: "Is it not possible in any way to hold in check the vile women who at present prey upon and poison our soldiers in London?"

Gentlemen of the Arkansas Medical Society, a word of enlightenment from you calling attention, not only of the military authorities, but of the officers of the State and the counties and the cities of the State of Arkansas, to this condition at this time would ring out like a clarion sound, and would go very far towards clarifying the atmosphere when men begin to consider obscurely and abstrusely questions which they do not understand.

On the Mexican border last summer our two army regiments were faced with this condition, reported in the Literary Digest of last month: "Vice districts were established especially for the soldiers."

I am one of those American men who do not believe that vice districts should be established for the soldiers. I believe that it is the duty of men and women who know better ways, who have the authority, who have the education, who have the experience, to stand like sentinels on the tower and call attention to the great danger. (Applause.)

From the files of the magazine, "American Journal of Social Hygiene": "A woman was found to be in the active stage of syphilis, and during two days had relations with 120 soldiers. In one of the large cities the soldiers thronged the vice districts in the evening, and before many of the 'crib' doors, soldiers stood in line." A crib, 6x8 feet, with a cot and with a woman in it, waiting in the door, for your boy and for my boy to come in and be polluted for life. Do American men need to stand for that kind of thing? Whose duty is it to bring attention to these things? Only medical men and medical women, military men and mayors, and other public officials who have had occasion to observe and to see.

At one hospital clinic in France, syphilis increased almost 50 per cent during the first sixteen months of the war, and almost 67 per cent the following eighteen months.

Venereal diseases have been causing havoc in France and Italy since the war began.

Venereal diseases, gonorrhea and syphilis, cause serious complications in later life, and these diseases will be spread among innocent women and children when the war is over.

This is not in the way of enlightenment to you distinguished gentlemen, to you professional men. This is a pamphlet that is issued for laymen from which I have quoted and made extracts.

"No disease," speaking from Prince A. Morrow on "Social Disease and Marriage," "has such a murderous influence upon the offspring as syphilis; no disease has such a destructive influence upon the health and procreative function of women as gonorrhea. Inherited syphilis constitutes a powerful factor in the degeneration of the race."

"All previous war experience shows an increase of venereal disease. When peace comes, there is the danger of grave and widespread dissemination of these diseases. It is for that that we must be prepared, and there is no time to be lost."

We find that in England, a National Association under the direction of the government has been organized for combatting venereal diseases, showing that that great government has realized (possibly too late for hundreds of thousands of those young men of England have been contaminated), that they have this great problem to combat.

Prophylactic measures, while helpful, are insufficient. The transmission of disease itself is only part of the problem. "From the social point of view the question is not only one of the effect of venereal disease upon the social body, serious as that is. The more far reaching evil is the state of mind and of character which lies back of it. The greatest evil to society results from the shattered ideals, lowered standards, sensualized minds and perverted practices, which are brought into home life and society by these young men who represent in large measure the cream of the young manhood of the nation. To safeguard the home and society against these basic evils, we must not only abolish venereal disease, but we must minimize, so far as possible, prostitution itself."

Dr. Exner, in "The Physician's Answer," has a statement declaring that there is no evidence that abstinence is "inconsistent with the highest physical, mental and moral efficiency," has recently been signed by 360 of the foremost medical authorities in the United States.

General Frederick Funston, the lamented Funston who died only a short time ago, writes:

"I understand that it has been claimed that I viewed with tolerance the existence of these places because I thought them necessary for the contentment and well-being of the soldiers. I assure you that my opinion is exactly the opposite."

The commander of one camp suppressed prostitution absolutely on the ground of military necessity, though he did not technically possess the authority to do so. There was much less disease in this camp than in any other observed.

And, further, "Major General O'Ryan, of the New York State troops, issued orders forbidding all use of intoxicating liquors and all patronizing of immoral resorts." Commenting on these orders and the results, the "Rio Grande Rattler," printed weekly by the New York division, says: "We have demonstrated that United States soldiers can live three months in camp without losing more men from venereal and other diseases than they would lose in three months fighting."

Now, as to whether a resolution adopted sincerely and earnestly by a body of professional men can be of help, just one word:

The educational work of the Oregon Social Hygiene Society shows that education is effective. Says R. C. Coffey, of Portland, a prominent physician, not a member of the Society: "From what I can learn from doctors over the State, the prevalence of venereal diseases has diminished more than half during the past two years. The proportion of surgical operations on women resulting from gonorrhea is certainly less than half what it was two years ago. This I think must be attributed to two reasons: First, prohibition, and second, the influence of the Oregon Social Hygiene Society, Portland, Ore."

Let us bring that down to date. The present policy in the city of Little Rock has been in effect nearly four years. Ask any right-minded, serious and sincere thinking physician what has been the result. If he is candid with you, he will tell you that he has noticed a diminution in venereal diseases. One of my friends among the doctors a short time ago made a poll of thirty active, practicing physicians among the younger men, and they told him that it was positively a fact that the new policy had resulted directly and immediately in a great falling off of cases of that kind brought to them in their practice.

During the last five years, not less than thirty vice commissions made up of physicians, lawyers, educators and business men have declared that the policy regulating prostitution by the examination of prostitutes in restricted districts is ineffective and city after city has abolished its restrictive district for the protection of commercialized prostitution."

I am glad to say that we are ahead of even that thirty. Our work began six years ago, resulting in the mitigation of the situation by the Vice Commission of the city of Little Rock.

Now, gentlemen of the Society, you have been kind to me. I am sure I have taken up more time than you would ordinarily have allotted to an address of welcome; but I am a practical man, and you certainly are practical people. Why should not this Arkansas State Medical Society, if it believes these statements, if, in your minds, you think that such a thing is proper and right at the present time, why should not this Society at this meeting go on record as favoring more enlightenment for the young men and for the young women, for that matter, God bless them. Why should my son, and your son, be exposed to the follies of ignorance, when it is your duty and my duty to help them and to reach them and teach them? I don't believe that this body of patriotic American citizens, thinking over the problem as I have tried hastily to sketch it,—I do not believe that you are going to be remiss in your duty at any time. If you do what I conceive to be your duty, then your idea of duty and mine will correspond.

On behalf of the people of the city of Little Rock, and on behalf of the boys of Arkansas,—and I want to say to you that I will thank you for them because they don't know what they are getting into, they don't know it and you do. I thank you. (Applause.)

ADDRESS OF WELCOME, BY DR. R. L. SAXON, PRESIDENT PULASKI COUNTY MEDICAL SOCIETY.

Mr. Chairman and Gentlemen:

When the program committee notified me that I was to have a few words on this program of welcoming you to our city, to our midst, I thought it would be a very easy task. I would not have had the time allotted to me sufficient to say what I would like to say to you without boring you perhaps. They divided my dose into two portions, as we do sometimes in the practice of medicine, taking from each bottle alternately. They were to have me give you one shot this morning in the session of the House of Delegates, and give you a double shot to make sure at the gathering this afternoon. I studied over the matter, and after thinking that perhaps the members of the House of Delegates would be about the greater portion of the audience, I decided to escape this morning ,and not let you know what was coming in the afternoon; so that you would be here to hear the mayor make his speech.

I say again that it would appear to you a very easy matter to extend to you a hearty greeting to our city. But, just where to commence, and how much to say, what to say and how far to go with it without intruding on somebody else's territory, is not so easy. So, I have merely sketched off a little article in order that I would not wander around so much and bore you too long, as some of these members, I know, want to go to the ball game.

The mayor has given you a very thorough, opening-up speech, about a subject that we should try to handle during our session. It was very appropriate as a preface to our meeting in the city at this time to open up the subject of medicine. I thought that he was going to tell us, you know, about the nice things that he had scattered around here, that he would let you doctors in on. You know the city is "bone-dry" now, and we haven't anything left to drink but Bevo and Coca Cola and a few things like that.

But, you will pardon me should I express or show flattery over being fortunate enough to be honored with the privilege of extending to you our unanimous welcome. I feel proud of our society of our great State, the greatest society of the greatest men in our commonwealth, to select the greatest city for its meeting place, and for the greatest county society in the State to give me the greatest place on the greatest program of our greatest society. It makes me pause to say to you all, "Welcome to our city." To meet for the purpose of business gain is a laudable cause. To meet for the purpose of ethical principle is a laudable cause. To meet for the purpose of religious influence is more laudable. But, to meet for the sole purpose of social welfare and scientific progress is the most laudable cause of man. I only wish I had the power to make each and every one of you feel that we are truly sincere in extending to you our welcome. We hope that you will make this, the forty-first meeting of the Arkansas Medical Society, the best meeting in the history of the society. I welcome you to our hospitals, to our fields, to our markets, to our homes, and to our confidence. I do it in the name of the Pulaski County Medical Society. I thank you. (Applause.)

President: We have just received a wire from Dr. Estill D. Holland, of Hot Springs, that his wife is sick, and he is unable to be here. Dr. Lemons has been conscripted to fill his place.

RESPONSE TO ADDRESS OF WELCOME.

Dr. J. M. Lemons, of Pine Bluff:

Mr. President, Ladies and Gentlemen:

I am reminded of the fact that they have got me into this like they got Dr. Gibson this morning, and I expect that I might quote Dr. Gibson thoroughly when I would say, if you had given me a little time I might have bored you with a long speech. But, as they have just conscripted me into this service, what I shall say will be very short indeed. After sitting here and listening to the great and grand addresses that we have had from the mayor of Little Rock and also from one of its foremost physicians, I can hardly command words to express to you our appreciation of your hospitality and your welcome to your city. We wish to assure both the physicians of Pulaski County and the good citizens of Little Rock that we appreciate very much the hospitlaity that you have shown to us at this meeting. To show you how much we appreciate the good feeling of Little Rock, you will find on the lapel of the coats of most everyone a beautiful rose, indicating that we are trying to help and show to you that we want to buy milk for the babies of your city. (Applause.) So, gentlemen, it is not worth while for me to take up your time any further, as there is much more to follow. But, in behalf of the medical society of the State of Arkansas, we thrice are very glad to be in your city. (Applause.)

Dr. Lemons called to chair.

Dr. Lemons, 2nd Vice President: We come now to the president's address, by Dr. Norwood, of Lockesburg.

(Printed on first page of Journal.)

Dr. Lemons: I will appoint Dr. J. C. Wallis, Dr. Don Smith and Dr. F. T. Isbell as the Committee on President's Address.

President: I have the pleasure of introducing to you Major Cole, of the United States Army, who will talk to you a few moments on Medical Preparedness. (Applause.)

Major Clarence Cole:

Mr. President and Gentlemen of the Arkansas Medical Society:

I hope that the few words that I may say in trying to present the thought that is on my mind may merit the applause that you have just given me. I am not a talker. When Dr. Meriwether called me up yesterday and asked me if I would talk to you, the only reason why I accepted was that I felt that I had one pointed thought that I could give you that would be a wonderful help to us in this time of hurry, now that we are preparing to enter this war, and to enter it to win.

There are many things that I could talk to you about, but this one is something that I feel vitally connects you and ourselves in the military service right here in Arkansas today, and that experience is gained from the three weeks I have been here. And I know that if you will co-operate with us in the manner that I am going to suggest, it will help us very much; and it will be the means of your giving service, every one of you, now at your own home, without any sacrifice on your part. But it will be immediaetly doing something for the service.

Now, under the present military law that has been enacted, and is being enacted by our Congress today, the United States will have a military force behind it to conduct a war such as this nation has never had before. In all of the wars that we have had, and culminated by that great war which separated the two portions of the country, hundreds of thousands of lives were lost simply because the machinery was not put in shape until the struggle was on, and men were slaughtered because they had not been prepared. Our aim today is to have perfectly conditioned men ready, perfectly trained men, and when we engage, if we have to—God forbid that we may have to have men killed on European battlefields—but, if we should, we hope that we may be in a position to win, and do it promptly.

The subject which I want to speak to you about today is the matter of physical examination. In order to put an army in the field to win, we must have men who are physically qualified to conduct those burdens. Now, there are many disqualifications that come to you first, that you, as family physicians, are aware of, and sometimes you are prone to pass that man on, and say, "Go ahead, you can take that examination," or something of that kind. Now, if you men would be firm, when you know of certain disqualifications, I will show you later how this matter will revert on the man with this trouble should he come in, and it will not be a detriment to you in your practice if, because this boy happens to be the son of a prominent patient of yours, that you pass him along. Otherwise, if you say, "I am satisfied this will debar you," you will save a great deal of trouble.

Now, in the examination of this First Arkansas Regiment, which we had to conduct, we completed it in seven working days. With these 2500 men that we are expecting here in the next week, we will have to do better than that. I expect that we will take something like 800 men a day. To do that you must have organization. One man with one of these disqualifications causes a loss of time. Just a case in point. The other day a young man came up for examination for this reserve officers' training camp. After he had been examined, he said, "Well, if this varicocele bothers me, I will put on my suspensory." He said that his doctor had told him to take off this suspensory, and, if this wasn't detected by the examiner, that it would be all right. I could tell you of a number of men who lined up there. Major Abington remembers the details. You could see those men lined up that could not come to any approach in standard at all of physical condition. Now, those men were an expense to the Government in bringing them here, and a reflection is cast on the regular army medical officer when he comes to examine them, because the people say such an enormous number of these men have been rejected. It is not the fault of the medical examiner. It is the fault of some one who was asked to look these men over, and did not cull them out and say, "this man should not go" because he is palpably disqualified, and he has got to be disqualified at some place, because we cannot take that kind of men into the ser-

vice. I am only making an appeal to you to look those men over, and be a little firm, rather than pass them aloug. But, to show you those men will ultimately have to be weeded out, can read two Articles of War to you, which will clear the matter up. And, whether that medical examiner should overlook this thing or not, he is not the man who is beinc tested. It is the candidate who is being tested, and the establishment of the United States Army is such that its machinery will go on, should one of its representatives fail to detect all the infirmities of the candidates who come before him. This will illustrate the point: :

"A fraudulent enlistment is an enlistment procured by means of a wilful misrepresentation in regard to a qualification or d.squalification for enlistment, or by intentional concealment of a disqualification which has had the efect of causing the enlistment of a man not qualified to be a soldier, and who, but for such false representation or concealment, would have been rejected."

"Wilful" means "intentional", thus excluding a case of mistake.

"Misrepresentation and concealment include any act or statement however made which has the effect of couveying an untruth or concealing the truth concerning the applicant's qualification or disqualification for euilstment."

No one of those men pass by me—and, when I tell you that in our last examination those men passed by me at the rate of one in not more than two minutes, when our machinery was going, you can determine things have to go pretty fast, and the machine has to move very orderly,—not one of those men passed by me but he was asked, "Have you anything the matter with you?" That cinches that man, so that if he had anything the matter that he concealed, and subsequent examination brought it out, he is subject to court-marshal. He is subject to a disgrace for the rest of his life, which begins with his confinement in the federal penitentiary, and being discharged as a criminal thereafter. You can help that man, and save that man from incurring this by telling him that he has this fault, and in your opinion he could not go; or, tell him that this fault, in your opinion, might disqualify or might not.

Now, the other side of the question: Supposing this doctor who told this man to lay aside his suspensory, and if it got past me, all right, we will see what it means to a brother doctor, who has a responsibility, and a big one, upon his shoulders. Three days ago, I received orders to act as surgeon for this training camp, and today the machinery is in motion to spend $7,000 for the construction of a hospital, and the order is being executed today for the equipment of that hospital, with all the modern requirements in instruments and appliances that are required for a modern hospital. Now, those are some of the responsibilities; and besides that, I have to do this examining, and Major Abington and I are caring for the sick.

Now, that Article that jeopardizes me when a brother doctor, who can help us at this time, passes the "buck" (if you will allow me to use that term)—is this:

"Any officer who, knowingly, enlists or musters into military service any person whose enlisting or mustering in is prohibited by law, regulations or orders, shall be dismissed from the service, or suffer such other punishment as the court-marshal may direct."

That's the responsibility, gentlemen, that you put upon me when you say, "Go ahead; don't wear that suspensory; don't tell him about that." I take care of the man myself by requiring that statement from him, which binds him during the time of his enlistemnt. I am perfectly sure, now, that that matter is brought to every one of you, that it will have a different light upon it. You don't have to bring yourself into any disrepute with any person, but just simply explain the condition that occurs when that man comes and asks if you can not do something to get him passed with this disability.

Now, do not refer to operations and things of that kind that will make a man suitable for the service. That, of course, is legitimate. It is the idea of keeping this enormous number of applicants here and making it look like the officers in the federal service exercise no discretion, and just turn men down ruthlessly, when they do not. They want to get men in there who can stand the brunt of service; who, barring accidents, will stand gunshot wounds and such conditions; who will stand the service, and return well men, and that the commanding officer can bring back his regiment with the least loss possible due to disease.

Now, just a few things hurriedly, if I may be allowed to take just a minute more time. There are certain things that look trifling that have to be considered in a military aspect. I will just mention a few. These young men are coming up now every day; every one of them has a certificate that they are sound, except that they have this, or except that they have that. If all these young men come to us in the next few days, that puts 2500 men on me to examine between now and the time of the organization of the camp, in addition to the other work. Then, these men are only examined now as an accommodation. A week from now they will have to be examined, and fiually rejected—because we know in advance that they have not the, qualifications to admit them to the camp, unless you people, in every one of those iustances, will consider your life insurance examinations and things of that kind, and such military aspcets as I may be able to present to you only partially today, in their bearing to these men's condition.

Now, the feet and limbs of soldiers, of course, are like the feet and limbs of horses. If that soldier has not good, sound feet and limbs, he is uot worth anything as a soldier, because we have got to consider him able to go on the order of some other individual to the limit of human endurance. Iuvariably, when I tell these men with flat feet that they could not stand the march, they will come back and tell me how long they walk. Maybe they do. I haveu't disputed it for a minute. But, they don't walk under the order of somebody else and walk until that fellow tells them to quit. They stop when they get tired, and sit down. Now, that is the proposition you have got to clear up with reference to flat feet. You have got to look, also, for hallux valgus, because that soldier is going to get blisters upon his feet quicker than the other fellow. He is going to wear shoes sometimes gotten brand new from the storehouse; he has got to have his feet covered, and he has got to march at the same time. If he has irregular bones, irregularity of his feet, overriding toes, he cannot be used, because those toes are going to blister and knock hiu out. So that, in itself, is a grave thing; very grave.

Varicose veins are giving you trouble. Varicocele rarely amounts to anything. We only require the man to say that he will consent to an operation. Then, we will admit that man with the varicocele.

Of course, heart lesions and things of that kind cannot be considered. The man must be thrown out at once. If you find a murmur indicating the mitral lesiou it is better to take no chances on that murmur and try to determine whether that is functional or organic. As I tell you, you have to decide quickly. In this last examination I found a mau with a heart that had a slight murmur. I thought it was a mitral. Iu the short time I had to examine, I had to decide. I reported a mitral. He came to town and some one examined him and said he didn't have a mitral. He came back and asked if he could not be re-examiued. I did not for one moment feel that the diagnosis or the exact name that I put on some of these conditions will stand the test of one hour's consultation and diagnostic test that can be given in the consultation room. It is, in my judgment, the correct name. The man has something wroug with him that disqualifies him from being a soldier. That's all that I need to know. The man came back, and I re-examined him. He had no mitral murmur that I could detect. He had an enlarged heart. The point of maximum impulse was displaced to the median line. He had a marked murmur in the sub-clavian space. He was under weight, etc., from all these things, and uudoubtedly would not make a soldier. Yet, doubt was created iu that company commander's mind and in the mind of this soldier as to my ability in detecting specifically the name of what that man had. The idea of what the qualifications were was entirley lost, and that was what the man was rejected for. I thought, on the hurried examination and with the examination that I put him through, that I had detected a mitral. Now, those are some of the points. Certain things that seem trifling, like a deflected septum, are very bad, because they interfere with a man's breathing capacity. Deformity of certain fingers and joints also have their influence. The loss of more than one joint on the right forefinger is not permitted. That is one thing that is so frequently spoken of. That is all I will mention about those special conditions of the examination.

Your president mentioned farm sanitation. I just came from San Antonio, where we had in camp a large number of troops. We had the Mississippi regiment and the Alabama cavalry, and the District of Columbia troops, and some Wisconsin troops. The sick report for the Mississippi regiment and the Alabama regiment went to the enormous number of 80 or 90 per thousand that had measles. Our report will be out some time later. We made a hookworm survey of those two regiments and the Fourth Texas Regiment. Of these regiments that had this high sick report, Alabama and Mississippi, Alabama had 66 per cent of her personnel positive for hookworm, Mississippi had 34 per cent, and the Fourth Texas had 6 per cent. The Fourth Texas had practically no sick report, and they were in the same camp. They had a little measles but it did not spread. The death rate from pneumonia following measles was high in those two regiments. Now, that point is directly to that point of farm sanitation that the nresident spoke of, and has its direct influence in the army, as you can see by the experience of these two regiments. The Alabama infantry regiment, which was out in New Mexico, lost very heavily through pneumonia. They gathered some statistics about the percentage of men who had hookworm who died with pneumonia, and the percentage who didn't die with pneu-

monia, which will all be very interesting right along this line you have mentioned.

I thank you very much, gentlemen, and I hope that I have said something to the point at the present time that will show you that we need your assistance very much just now in helping us over this very hard task of culling out men who are clearly undesirable, so that we will get a chance to select the very best men for the military service at the present time. I thank you. (Applause.)

Dr. L. Kirby, of Harrison: I want to know if the Government furnishes any blanks for physicians to examine applicants.

Major Cole: There is no blank that I know of, sir, now. There is a typewritten form that Major Hawkins is expecting. Major Abington or I will take this matter up with Major Hawkins and ask him if he can furnish a certain number of these blank forms to this Society; so that each member may take a copy home, and then with their typewriter they can make copies. You know this is an emergency, and I doubt if they are ready yet, but Major Abington or I will take it up.

Dr. Kirby: We are rather ignorant as to just what is required.

Major Cole: The principal thing is about the feet, ears and vision. Of course, I can tell you what the requirements for vision are, so that you will not need to bother about that. A man cannot have less than 20-40 for the right eye and 20-100 for the left eye for this training camp.

Dr. Kirby: What is the test type that you want to use?

Major Cole: The Snelleu. You must have glasses that will correct at 20-20.

Dr. Kirby: How many of us country doctors can correct that? That's the question.

Major Cole: He will have glasses that will show you whether he can correct or not. I do not believe many of those conditions are going to come up.

Dr. S. S. Beaty, of England: How about astigmatism?

Major Cole: That's all covered by this one thing. That is not considered an organic disease, if it is corrected; not above 20-40 in the right eye and 20-100 in the left eye; it is all right when it can be corrected. We test our applicants at 20 feet. The fraction is 20-20. The denominator of the fraction is changed to 20-30, if he reads the line above.

With reference to hearing, we use the voice; the whisper test. If a man can give you the whisper test, it is easy to go on with the watch test or any of the special apparatus. And that man must hear such as "Repeat what I say. Chicago, St. Louis, Cincinnati," and such things as that,—20, 40, 80 and 90, with both ears. Then, the same things, with other words, repeated with a whisper, only you are whispering 60, 90, and 100, and such as that.

Dr. Kirby: You don't test the ears separately?

Major Cole: Yes. Each ear is tested, and he must hear that at 20 feet, with both ears. Of course, as I said, all heart lesions are rejected. Now, there is a certain scale of weight that allows a little variation. I can give you a simple rule that will help you. You find these muscular individuals who are naturally slender and spare, they come under the minimum requirements; but the fellow who comes markedly under the minimum requirements, you can look for something in his digestive tract or respiratory tract or in his heart that will account for that condition. is for every inch up to 64 inches in height, a man should have 2 pounds in weight. In other words, for 64 inches in height—that is the minimum in height—there must be 128 pounds weight. For every inch in height above 64, you should add 5 pounds in weight. Now, that is a simple rule, and will tell you whether that man is going to be acceptable from weight alone.

As I tell you, weight does not bar a man if he is physically robust. It just happens to be one of those unexplainable conditions that frequently occur. But, if there is any marked disparity in weight, you can look for something else.

Delegate: How much loss of fingers?

Major Cole: On the left hand, if the joints are not stiff so as to interfere—for instance, a stiff finger like that (indicating) could not be accepted. Any finger that would get in the way. On the index finger of the right hand, a man cannot have the loss of more than the first phalanx, and the remainder must be suitable so that he can still use the trigger. We would prefer, if the man has other disqualifications or other questionable things, not to have a man with the loss of his index finger at all. But a good man, a man who is physically fine in every other requirement, should not be turned down for that. Flat feet, of course, interfere with that soldier's march. He is going to tire out, he can't keep up the pace. I have taken a number of men with what I call moderate flat feet. There is one thing: you can take a man who is a pretty big strong, muscular fellow, who has gone barefooted all his life, you can exercise a little discretion with him. In the case of the negro, when we get those soldiers in for our colored regiments, they never do peter out as far as their feet are concerned. That is just natural with them. They have to have it that way, but we can not do that with the white men. So, there are little things that come in in the consideration of the different classes of soldiers.

Now, there are certain other qualifications that are not so vital. The mountain artillery man has to be 5 feet, 9, because those men have to lift these field cannon up on to the backs of mules, and a little short fellow could not do that at all; because he would have all his arms up there and would not be up with the gun. So, there are special qualifications. The cavalry man should be not hardly as big framed a man as the infantryman and artilleryman, because they have to ride and the idea is to get men of moderate size so that they will not weigh the horse down.

Dr. Meriwether: Tell us something about the teeth.

Major Cole: They must have two opposing molars, sound, on each side. That is the minimum.

Delegate: You mean that have not been filled?

Major Cole: Sound opposing molars; yes.

Delegate: How, if filled or crowned?

Major Cole: If it is good work. You know those conditions, of course, all have to be threshed out on their merit. A man who had crowned teeth, and was evidently well nourished, with firm gums, can be taken; whereas, this spare man who hasn't any weight to spare, you could not take chances on him because that loss of weight may be due to the fact that he is not getting his nutrition from the mastication of his food; on account of this defect, when we put him on hard tack and bacon, he might again lose nutrition and be back in the hospital.

Dr. Beatty: Does pyorrhea disqualify a man?

Major Cole: Yes.

Dr. H. H. Rightor: The committee appointed to draft that resolution is now prepared to report.

Whereas, it has come to the knowledge of the Arkansas Medical Society that certain Senators and Representatives in Congress assembled are grossly misrepresenting their constituency,

Therefore, be it resolved, by the Arkansas Medical Society in session at Little Rock, May 1st, 1917, does strenuously disapprove of the conduct of Senator W. F. Kirby at this time of National stress, and that we urge him to get in line, support the policy of our government, represent the wishes of his constituents or resign that we may send one who will.

Be it further resolved, that a copy of this resolution be wired to Senator Kirby, spread on the archives of

the Arkansas Medical Society, and published in Little Rock press.

Respectfully submitted.
H. H. RIGHTOR,
EARLE H. HUNT,
CHAS. H. CARGILE,
Committee.

On motion, adopted.

President: There is one matter to come up at this particular itme; that is, the selection of names for the State Board of Medical Examiners. There are four vacancies on the State Board of Medical Examiners. There will be three selections from each Congressional district. They will be certified to the Governor, and he will make his appointment from that list of names.

The following names were selected:

Second Congressional District—Dr. G. A. Warren, of Black Rock; Dr. T. J. Stout, of Brinkley; Dr. L. T. Evans, of Mount Pleasant.

Third Congressional District—Dr. E. F. Ellis, of Fayetteville; Dr. Charles E. Hurley, of Bentonville; Dr. Frank B. Kirby, of Harrison.

Sixth Congressional District—Dr. O. D. Ward, of England; Dr. J. M. Proetor, of Hot Springs; Dr. J. T. Palmer, of Pine Bluff.

Seventh Congressional District—Dr. H. H. Henry, of Eagle Mills; Dr. Don Smith, of Hope; Dr. J. C. Simpson, of Hamburg.

On motion, the General Session adjourned.

HOUSE OF DELEGATES.

SECOND DAY, WEDNESDAY, MAY 2.

The president called the House of Delegates to order at 2:30 p. m.

Secretary: I just received a telegram from Senator Kirby.

Washington, D. C., 2 p. m., May 2, 1917.
The Arkansas Medical Society,
Little Rock, Ark.

Notice of resolution disapproving my opposition to the conscription bill received. I regarded is as unfair, unjust, undemocratic nad unAmerican to conscript only boys from 19 to 25 to fight the country's battles, excluding all men of present military age to forty-five from service and unnecessary since the troops raised can not be equipped before August 1st, by which time upon call more than a million would have volunteered. It is a departure from the practice, history and traditions of our country whose military glory is the history of the American volunteer who fought all our battles to victory. Such conscription had to be adopted by Congress before it became a policy of government and I opposed it to the last as a representative of our State and the American people. Now that it has become the governmental policy it must be pursued. I trust you will be able to attend properly to all your own business and record this with your resolutions. WM. F. KIRBY.

Roll call disclosed a quorum present.

President: The first order of business is the report of the Council.

To the House of Delegates, Arkansas Medical Society:

The Council of the Arkansas Medical Society begs leave to report that it has carefully audited the books and accounts of the Secretary and Treasurer and has found them correct.

Dr. W. R. Bathurst was re-elected editor of The Journal—the amount of $500.00 each was allowed the editor of The Journal and the Secretary of the Society in remuneration for their services the past year. $125.00 each was allowed the editor and secretary for stenographic work. The secretary was authorized to buy a new typewriter and get what credit he could on it for the old one.

The secretary was instructed to remain custodian of all the archives of the society, and to collect such missing archives and records as he may be able to obtain.

The council does not recommend the adoption of the resolution introduced at the last meeting governing professional advertising in The Journal.

The council recommends the cooperation of the Society with the A. M. A. in sending organizers into the State.

The following bills and accounts were approved:

To the Committee on Infant Welfare	$ 18.00
To Dr. J. T. Clegg, expenses as councilor	25.00
To Mr. Overton, stenographer	39.90
To Dr. Meriwether, expenses as delegate to A. M. A.	97.00
To Central Printing Co., April Journal	156.46
To Sec'y Meriwether, stamps and incidentals	61.25
To Editor Bathurst, stamps and incidentals	38.88

A unanimous vote of thanks was extended Editor Bathurst and Secretary Meriwether for the very efficient manner in which they have conducted the business of the Society. J. T. CLEGG, Chairman.

On motion, the report was adopted.

The Committee on Constitution and By-laws made the following report:

To the House of Delegates of the Arkansas Medical Society:

We, your Committee on Constitution and By-Laws, recommend that the following changes be made iu the constitution and by-laws:

1st.—That Section 2, Chapter 4, be amended as follows: After the word "thereof" in the fifth line to read as follows: "provided that its annual report and assessments are in the hands of the secretary 30 days prior to the annual meeting. Each component society, however, regardless of its number of members, which has complied with this section, is entitled to one delegate."

2nd.—Section 3, Chapter 7, be amended as follows: Omit the last ten words of the section.

3rd.—Section 8, Chapter 9, be amended as follows: After the words "into whose jurisdiction he moves" add "and this request must be made within twelve months."

4th.—Section 5, Chapter 9, be amended as follows: Omit the following words beginning in line 6: "who is a graduate of a reputable medical college."

5th.—Section 3, Chapter 6, be amended as follows: The treasurer shall give bond in the sum of $3,000.00.

6th.—Section 4 shall be amended as follows: The secretary shall give bond in the sum of $3,000.00.

H. H. RIGHTOR,
J. T. CLEGG,
WM. R. BATHURST,

Secretary: As to the second change mentioned in the report, I will explain why that was done. The judicial council of the American Medical Association has never had any jurisdiction except in an advisory capacity. If a dispute came up between an individual member and the county society, or between the county society and the State Society, the council of the State Society was the sole supreme court. At the meeting of the American Medical Association last year the constitution and by-laws of the American Medical Association were changed so that the judicial council of the American Medical Association is the supreme court on any point of law. Any evidence that might be taken up in the trial in the county society or in the State Society on an appeal to the council would not be submitted to the judicial council of the American Medical Association, but just simply matters of law and ethics. Heretofore the judicial council has not had any authority at all exeept as an advisory board. They would advise the council of the State Society to do so-and-so, and they had no authority to carry out anything So, they amended the constitution of the American Medical Association so that the judicial council of the American Medical Association is the supreme court of medical organization. Now, in order to comply with that amendment to the National constitution and by-laws, we will have to cut out this part of our constitution and by-laws: "and its decision in all such matters shall be final." That means, our State Council. This is just simply complying with the constitution and by-laws of the Amerieau Medical Association.

As to the third change, we have men who belong to one county society in the State that have moved into another county society and live there ten or twelve years, and hold their affiliation in the county society in which they originally joined. There is a great deal of dissatisfaction, and it places us in a position where we don't know just how to handle

it, and if we can get this amendment it will fix it so that we will know just what to do.

President: You have heard the report of the committee. Of course, we understand these amendments have got to lay over for one year before they can be voted upon, but I thought maybe somebody had some amendments to add to the amendments.

Dr. H. Thibault, of Scotts: I move that the report of the committee be adopted, with the exception of that part of it that refers to Section 5, Chapter 9, as to qualifications of membership.

President: That is not debatable now. These are all published three times in The Journal, and will come up at the next meeting.

Dr. Thibault: My motion is in order, that the report of the committee be adopted, except that amendment with reference to that particular section.

Dr. F. O. Mahoney, of El Dorado: I second the motion.

President: Now it is open for discussion.

Secretary: For years I was opposed to the proposition of taking in undergraduates, but in 1909 we amended our medical practice act so that the undergraduate is no longer ineligible for examination. We have a number of undergraduates in the State that have the same legal right to practice medicine that any of us have. They are not, under our constitution and by-laws, eligible to membership in the county society or State Society. Arkansas has more of them probably than the majority of the States, but most other States do not have this requirement in there that they be graduates. But, whenever we attempt to start anything in the way of medical legislation or for the betterment of organized medicine, every undergraduate in Arkansas takes that as a personal affront, and thinks that we can possibly do something that will eliminate him from the practice. And, one of those men does more effective work in blocking medical legislation than any 150 or 200 men we have got in organized medicine help to get it through, because that fellow is like a drowning man grasping at a straw. He gets out and he fights among his friends, and he does effective work, while the members of organized medicine do not do anything to block it. Another thing, we have encouraged a great many of those men in the last few years to go ahead and finish their course and become good, effective workers in organized medicine, by taking them in to a great many of our county societies as associate members, which is really against the constitution and by-laws, but a great many county societies have done so, and know, to my personal knowledge, they were some of the best and hardest workers in the county society, got up good programs, and attended the meetings better than the members. We are vastly in the majority now.

And, I believe the time is ripe for us to extend the hand of fellowship to them and take them into the organization and make them one of us, because they have equal rights under the law and everything of that kind that we have, and the time is for us to take them in and make better men out of them and help us. (Applause.)

Dr. L. T. Evans, of Mount Pleasant: I was in the House of Delegates three times when this question came up, and I opposed it twice. But, I was councilor in my district for a couple of years, and I found out while I was councilor that we needed to take the undergraduate into the Arkansas Medical Society. I believe, to get Dr. Thibault straightened out, if you make a councilor out of him, you will get him right on this proposition. I think the time is ripe now that we should take these men in, because they have got just as much right to practice medicine as we have, and I think they should come into the society, and we can help them, and they will help us in trying to get legislation.

Dr. O. R. Stewart, of Palatka: I think we should take them in, because I believe they have got all the privileges we have, and especially privileges we have not. We have some undergraduates with us that, if they had gone into the society, they would not cut fees. But, on the other hand, he is under no obligation to a medical society or his fellow practitioner or any one else. These undergradoates have been practicing since 1909. He has been reading; he has been studying. At least, he knows the conditions of his own neighborhood. He does good work there. And, I believe now is the time to take them in and stop that fee-cutting, because that would put him in line to say, "I am a member of the medical society, and I am willing to do whatever they agree upon." I think now is the time to take them in.

Dr. Earle H. Hunt, of Clarksville: I opposed that eight or nine years ago. There are two undergraduates who have been members of our society. They have been loyal. One of them has been the most loyal member in our society. They have been paying their dues and taking The Journal. Those fellows who have been members, so far as you fellows know, they have been eligible to membership in the American Medical Association. They are fine fellows. We have three or four other undergraduates who are dandy fellows, and they are not cutting any prices, but they are ashamed to come in because they know they really are not entitled to come in. I was talking to one just last week, and he has promised to come in at our next meeting Monday. He said he is going to come in. We have been taking them in, and they need that Journal. I am in favor of taking them in throughout the whole State. I think they should be, because I believe we can control them better.

Dr. Thibault: I would like to be able to offer a substitute to my motion that we abolish all medical schools. And, simply, when a man wants to practice medicine, take him into the Arkansas Medical Society. It will rejuvenate him. It will educate him; make him honest; and make him pure in soul, and give him that scientific knowledge that can be attained nowhere else. From the remarks these gentlemen have made, it is a foregone conclusion. Now, gentlemen, if you will kindly elect me councilor some day, I will prove to you that, instead of trying to increase the membership of this organization by taking in the undesirable, I will go out and work. Lonoke County has never had a councilor present at one of its meetings except when the councilor lived in the county, and it organized itself without them and built up its membership close to the limits of the reputable physicians in that county. I realize the ambition of the officers to increase the membership while they are in office; but the way to do that is to get out and hustle. We had just as well take in the negro doctors. You can increase the membership about 30 per cent without doing a day's work. We had just as well amend this and say, "without regard to color, race or previous condition of servitude," let them all in.

Dr. Thad Cothren, of Walcott: I am like Dr. Evans and some more of them. Seven or eight years ago I opposed taking in undergraduates. But, in Greene county, where I formerly was, we have seven or eight undergraduates, most of them in the district where I lived. These fellows who worked out there sometimes would be a little quick in price cutting. We got together, and organized a separate society up there, called the Western District Medical Society of Greene county. We could not get those fellows to go to the county society, so we organized another; we worked independent. And, those fellows came in the society, attended regularly twice a month. We have a uniform schedule of prices, and everything went on good as soon as we got acquainted with them. I am heartily in favor of taking them in.

Dr. Dewell Gann, of Beuton: You remember four years ago, I believe, there in Saline county we took in a lot of those undergradnates, and they had more enthusiasm than any of us. I have been fighting for this for years, claiming that if the State gives a man the right to practice medicine, if he had as much right as I had, we ought to take him in. I want to make a motion that that sectiou be adopted as read.

President: We have one motion before the House. When that is disposed of, we can do that.

Delegate: I move that we table Dr. Thibault's resolution. Seconded.

President: If you table that resolution, you table the whole report.

Dr. Evans: That's simply a scheme to get this on the table. I don't want it that way.

Dr. Thibault: I rise to a point of order. This whole debate is out of order, because the constitution and by-laws specifically tables that whole business for a year before it is ever discussed and voted on. And, no motion in connection with it is in order whatever. It is automatically tabled, and a motion to table cannot be discussed. The whole busniess was automatically tabled immediately wheu that committee reported.

President: That is the point I made a while ago, but, to keep from having a parliamentary debate with you, I permitted this discussion.

Delegate: How about a man practicing without a license?

Delegate: That's up to the State Board. The House of Delegates has got nothing to do with it.

Dr. Hunt: I move that the secretary of the Arkansas Medical Society write to the Attorney General of Arkansas and get his opinion as to whether it is legal for a member of the faculty of the University of Arkansas Medical Department to be a member of the State Board of Medical Examiners.

Dr. Thibault: It is not. It simply says no one connected with any medical school is eligible for a place on the Board of Medical Examiners.

Dr. Hunt: That condition exists in the State of Arkansas today. I don't know whether we would have to have an opinion from the Attorney General.

Dr. Thibault: That's a specific statement in the law itself.

President: That's all covered by the statute. I don't believe it would be necessary for the secretary to do that.

Secretary: I think the State Board of Medical Examiners should ask the Attorney General if their acts are legal with a man serving like this. That's up to the State Board of Medical Examiners to find out from the Attorney General whether or not their acts are legal.

Dr. J. F. Sanders, of Blytheville: I am very glad it has been brought to the attention of this body. Over in my county we have got an uudergraduate who has practiced medicine over there without the proper restrictions. About four months ago, this matter was reported to the board of censors in the county medical society, of which I was chairman of the board. We got in behind him, got the deputy prosecuting attorney after him, and had him arrested and brought in and fined. I don't know exactly what the amount of the fine was, but possibly a nominal fine, and he promised that he would not practice medicine any more without the proper credentials. Of course, he could not get it. He went back to practicing again about two weeks ago. The matter was made known to us again. The grand jury was in session just at that time. I filed a complaint and placed it before the grand jury and they had him brought before the grand jury. But, when the gentleman got over there he brought a receipt from the magistrate he had submitted his case to the magistrate court three days before the grand jury was in session, and paid $5.00 more. Now, that is the kind of hocus pocus they are playing in several parts of the State. They are fined, bnt, in order to avoid that fine, they are going to submit to the magistrate and be nominally fined. Now we are goiug after this gentleman in the federal court for practicing medicine. He is not a gradnate bnt an nndergraduate—for prescribing opiates without being a graduate of medicine. Of conrse, we will get him there.

On motion, the House of Delegates adjourned.

GENERAL SESSION.

THIRD DAY, MAY 3, 11 A. M.

Dr. C. H. Cargile, of Bentonville: I want to bring out at this time a matter, and ask that there be some special consideration of something that occurred in this State two weeks ago. Perhaps nine-tenths of you are not ready to guess what this is. On the other hand, all of you older members can readily gness or surmise what I have reference to. It would be unpardonable, indeed, to pass without some special consideration of this matter.

Two weeks ago at Fayetteville, there died a man who might be called the obstetrician at the birth of this Society. Not only did he serve in that capacity but he nourished it for years. I refer to the death of Dr. W. B. Welch.

It is probable that the younger members of this profession, nine-tenths or more of them, are not aware that he was the giaut of organized medicine. He was in his day, he was even after his death, a power.

It happened to meet him accidentally—it might be said, in consultation, in the case of a fellow member of this society. It was remarkable that a man eighty years old knew more of present-day medicine than very many of us.

I would not disparage any member of this profession, living or dead, but I believe I voice the sentiments of all those present when I say that orgauized medicine has never had his equal. I say equal in ability, in grasp, in spirit, as a man who stood for what was right and just between man and man, and the upholding of the ethics of the profession. He was a man of conviction, he was a man of courage. If he thought a thing was wrong, not good for organized medicine or to this Society, he had the courage to say so. And, these many gifts and characteristics made him possibly, all told, the most useful as well as the ablest man this profession has ever had, barring one or two, perhaps, in some particulars. But, altogether, perhaps, we have never had a more useful as well as abler man in this profession, in this Society. As I said before, with such a reputation and such a life of usefulness, it would be unpardonable in us to let pass this meeting without saying something out of the ordinary in the matter of a necrology. Now, there are members here who have known him longer than I; knew him more intimately than I.

Dr. J. T. Clegg, of Siloam Springs: I could not let this occasion go by without speaking a few words in eulogy of Dr. Welch. I knew him intimately for forty years or more. I helped to make him the first president of this Arkansas Medical Society. Dr. Welch as a man, as a physician, as a surgeon, as a gentleman, never had his superior in this country or any other. Ever ready to help the sick, ever ready to contribute to the poor, ever ready to take the young doctor by the hand and lift him up, take him over the hard places of life. He was my friend. He was the friend of every doctor in this State who was trying to do right. Dr. Welch was a great man. He was a great citizen. He was a great surgeon. He was a great doctor. And, I think that this Society

cannot do anything too much to honor the memory of Dr. Welch.

Dr. J. G. Eberle, of Fort Smith: It is a sad but pleasant duty for me to say a few words of tribute to Dr. W. B. Welch. I had the pleasure of his acquaintance for many years, and I feel proud to be able to say that I classed him as my friend.

It was said of a celebrated Dublin physician, when he requested that his epitath be written, that he fought shams. Nothing could be more true than to say of Dr. Welch on his epitath, "He despised shams." No man was more ready than Dr. Welch to condemn shams. No man was more ready than Dr. Welch to commend the good. It has been said that he was a giant in the profession. Nothing could be said more truly. "There were giants in those days," and Dr. Welch was a giant. A man of vigorous body; a man of vigorous mind, who devoted all that was in him to the advancement of the good and the condemnation of the bad. He was a brainy man; a man of indefatigable study; a close student, a deep thinker. He was ever abreast of the progress of the profession; not only the medical profession, but in literature, sciences and in State-craft. He was, as has been said, one of the founders of this Society. He led the fight to raise organized medicine out of the ruts, and placed it on the high pedestal of ethics upon which it stands today. He was an earnest man, and a man who gave the best that was in him for any good cause that he undertook. He served his country in the Confederate Army during the civil war. He did all that he could to advance the cause that he thought was right. He served his profession for many years. He did everything that he could to elevate it, and make it better and strong. He came into this Society, and was its first president, and, having, as I say, raised it on a higher pedestal than it had ever attained, it was his pride and his pleasure to watch it grow and prosper, and continue on the high plane upon which he did so much towards placing it. As has been said by my friend, Dr. Cargile, to many of the young men he was unknown, because the infirmities of age in recent years has prevented his attendance at the meetings, but no better example could we ask that they take to themselves than the life of Dr. Welch, a typical physician of the old school, who placed his love and his admiration for ethics and principles above temporary gain or temporary success. His death was truly a loss, not only to the medical profession, but to the State at large. A good man truly has fallen, and his place will be hard to fill.

Dr. H. Thibault, of Scotts: I would like to speak of Dr. Welch on behalf of the younger members of this Society who did not have the good fortune to know him very well personally. I never saw him but once in my life. The first paper I ever read before this Society, it was necessary for me to go through the records of this Society from the time of the old State Medical Association up to the time I read that paper. I had heard of Dr. Welch through older physicians that knew him well, and I was prepared to respect him. Whenever I ran across a paper of Dr. Welch's in the transactions of the Arkansas Medical Society, I found it a masterpiece, and I read it through. Whenever I ran across a discussion of Dr. Welch's, no matter how poor or how good the paper was, I found it a revelation. I was prepared to meet a man who was large in every respect of the word. When I saw Dr. Welch at Fort Smith, I was not disappointed. There was a paper read there on a very abstruse subject, that looked like it had neither head nor tail to it. We tried to discuss it, and didn't get anything out of it very much. Dr. Welch arose and discussed the paper, and his discussion of the paper was exactly in line with his discussions I had read in the transactions of the Arkansas Medical Society, and it disposed of the paper so thoroughly, so absolutely, in a few words, in a few minutes, that there was no more to be said, and the discussion stopped. I think that, in all the archives of the Arkansas Medical Society,—and I have studied them pretty thoroughly to get data for various things—there is nothing more worthy of preservation in the records of the Arkansas Medical Society than the records it holds of Dr. Welch.

Dr. J. C. Wallis, of Arkadelphia: Everything has been said that I can say. I personally was very well acquainted with Dr. Welch, and every time I came in contact with him I was impressed with the fact that I was in the presence of a great man, a man who loved his profession and who did everything that he could to advance its interests as well as those of the country at large. I consider him one of the strongest and one of the best men we have had in the State of Arkansas in the medical profession.

Dr. Cargile: We would like to hear from Dr. Ellis.

Dr. E. F. Ellis, of Fayetteville: I do not suppose that any man in Arkansas knew Dr. Welch better than I, and I can truly endorse everything that has been said with reference to his greatness. In our own town he was instrumental in inaugurating our hospital, of which we are all proud; not only in inangurating it, but he really was the main man to contribute funds to the establishment of it. And, I will say this: I never had a better friend than Dr. Welch, and in every capacity I can only truly say that he was, I believe, one of the greatest men I ever knew.

President: Does anybody care to refer to any of the doctors who have died in the last year? I presume several died.

Dr. J. T. Clegg: Northwest Arkansas lost another doctor, a doctor, also, who was a character. He was a good physician. He was a good man. He was an honorable man. He was a literary man; but a peculiar man. He was one of the greatest characters in a way that I ever saw. I allude to Dr. J. W. Webster, of Siloam Springs. Dr. Webster began his career as a boy, when he ran away from home and joined the federal army, went into the ranks, served in the service of the United States as soldier, as courier, in different battles, under different circumstances. He went into the civil service. After the civil service, he became a scout in the West. He was a soldier under General Custer. He barely escaped being with Custer at the Custer masacre. He subsequently studied medicine at Chicago and later advanced his medical education in St. Louis. One of the best men you ever met; a man of most remarkable bearing; a man who would attract the attention of every one with whom he associated; a man who was not known to many of these gentlemen present. Some of you may have known him. He was a good physician; he was a good surgeon; and he was ethical. He and I lived together in the same community for thirty-five years; we fought, bled and died together. We went over the hills and hollows day and night, through the rain and snow, together. We operated together. We did among the first abdominal operations that were done in that part of the State. He was always ready to assist; always ready to give; and, in every respect a most remarkable gentleman. I wish today to include this remarkable character in the eulogies of this Society.

Dr. C. H. Cargile: I do not want to consume too much time. I did not know Dr. Webster as did Dr. Clegg, but I knew him quite well, living in the same county with him. He was a fine character, and deserves all that we can say of him. I had the pleasure of seeing him with Dr. Clegg not long ago, before his death. It was sad, indeed, to see such a man pass away.

President: I want somebody in the audience who was well acquainted with him to refer to the late J. W. Meek, of Camden, a prince among men.

Dr. C. P. Meriwether: I have known Dr. Meek for the past twenty years. He was a grand old man; a man well up in his profession; a man who studied but was physically incapacitated for the great duties to which he was called to perform. Still, he never hesitated. He stayed to the last, and died in the harness; was out at work the day before he died. I think it would be remiss to not at this time say something in regard to Dr. Meek. I see here Dr. March, who possibly has known him longer than any one that I see, and I would like to hear from Dr. March.

Dr. C. J. March, of Fordyce: I knew Dr. Meek for thirty years. He was one of the best men I ever saw.

Dr. D. A. Hutchinson, of Nashville: My acquaintance with Dr. Meek has been of long standing. In the early 70's I first met him, he being a young graduate, and so was myself. We went to Southeast Arkansas, near the line of Louisiana, and practiced together, and we were quite intimate for years, he finally going to Camden and I to Nashville. We didn't meet for quite a while. I think it was about three years ago that I had the pleasure of meeting Dr. Meek here in Little Rock. We renewed old acquaintance, which was pleasant indeed. I knew Dr. Meek well. There was nothing negative about him; he was positive; easily understood. He was well up in his profession. Quite a gentleman in every particular. And, I think this Society, as well as the profession, lost greatly in the death of Dr. Meek. Some one said his physical condition was bad. I don't know about that, because I hadn't seen him for quite a while. But, Dr. Meek was an elegant, conscientious gentleman and a good physician, and always a stickler for ethics; loved right and hated wrong.

Dr. E. L. Beck, of Texarkana: I hardly want the opportunity to pass without saying something about Dr. Meek. I had known him long before I was a doctor. I knew him when a boy. More good things can be said of him than I am capable of saying. He was one of the greatest physicians in the State; an educated gentleman in every respect, medical and otherwise. He was a perfect gentleman, in the profession and otherwise; a man who was a student, who applied himself closely; you could hardly approach him on any subject that he wasn't thoroughly posted on. Notwithstanding the fact that he was physically incapacitated at times, I don't think there was ever a time that he was not always active, always ready to help his fellow-man.

Dr. J. G. Eberle: Another of our colleagues passed away since we last met, one of the pioneers of the Arkansas Medical Society, a man who served in a professional capacity and in the Confederate Army; a man who always attended the medical societies when he could. I refer to Dr. W. A. Brown, of Monticello, a Christian gentleman, possessed of all the traits of character that go to make up a man worthy of the name.

Dr. L. T. Evans, of Mount Pleasant: Last year at the meeting at Texarkana, I was on my way home and learned of the death of Dr. G. S. Saylors, a young man who graduated in 1914; a very energetic young fellow. And, I wish to speak of him at this time, that it may go on record to be used by this Society. Dr. Saylors died a young man, as I say. If he had lived he would have made his mark in the Arknasas Medical Society and in his profession.

Dr. H. H. Kirby, of Little Rock: I wish to call to the attention of the Society the death of one of its most noted members. Not only was he known locally throughout the State, but throughout the country. He, too, served his country, being one of the officers in the United States Army. I refer to Dr. Edwin Bentley, whose death occurred recently, and whom most of you knew. I am not as competent to speak as many of the members of this Society, who sat at his lectures and knew of his attainments to a greater degree than I.

Dr. M. G. Thompson, of Hot Springs: I am sure all the Society have always been proud of Dr. Bentley; as a teacher, as a co-worker, as a surgeon, as a man.

Dr. Morgan Smith, of Little Rock: I cannot let this occasion pass without saying a few words concerning the life and character of Dr. J. W. Meek, of Camden. I consider it fortunate for any physician to have known Dr. Meek intimately and to have been associated with him professionally, as I was for a number of years.

Dr. Meek was one of the most active members of the medical profession in Arkansas. He was a restless spirit, of indomitable courage, clear judgment and sound in all of his principles. He was called in consultation in South Arkansas far and wide, and was a surgeon of more than ordinary skill and ability. He progressed as medicine progressed. He kept posted in all the advances in bacteriology, and applied the newer discoveries in his practice. I never knew him to cherish an ill feeling for a fellow practitioner. The profession lost a valuable member when Dr. Meek passed away.

No one can read the early history of the Arkansas Medical Society without coming to the conclusion that Dr. Welch, whose life and character have been so eloquently portrayed by other speakers, was probably the most dominant spirit the Arkansas Medical Society has ever had. Several years ago I made a trip to Fayetteville for the purpose of meeting Dr. Welch, and the meeting was a benediction to me. He hated shams and frauds and was a great lover of the truth. He was militant in his nature, but it was of that progressive spirit which always advocated doing more for the service of humanity and the elevation of the medical profession. Dr. Welch was not chiseled out of ordinary material. The younger members of this society may read his history with great profit.

Dr. F. O. Mahoney, of El Dorado: I don't feel like it is proper to let this opportunity go by without speaking about a friend who passed away since our last meeting, a man who has probably taken more interest in organized medicine than any man in our section of the State, who has never missed but one meeting of the State Society, and that was caused by sickness just before his death; a man who served as Councilor from our district, and was later chairman of the Council, and, I am informed, he made one of the best Councilors ever in this Society. I refer to Dr. R. A. Hilton, of El Dorado.

President: There is one other distinguished man who died since our last meeting. I would love to hear somebody say something about Dr. H. J. F. Garrett, of Hope.

Dr. Cargile: In early life I knew Dr. Garrett intimately, before I knew anybody outside of my family. We were raised in the same place. He was younger than I. He began as salesman in his father's store. He discontinued that work, and began the study of medicine, and made his home in my family. He graduated in Louisville, and returned there and lived a year or two, and went then to Hope. Since then most of you perhaps have some more or less familiarity with his life. One of the truest and best friends I have ever known; a man who could be depended upon at all times; a sincere, honest man. I knew him intimately, as you see. I never knew the man to be false in any way. He was a devoted and true friend. He visited me after I

moved to North Arkansas, and I visited him. I felt honored in having that man for a friend and visitor in my family. He made rapid strides in his professional life. Unfortunately he had an organic heart disease that handicapped him. Indeed, oftentimes he had to give up the general practice entirely. To those who knew him well, I am not afraid to say that none of them ever knew him to do a wrong, or to be dishonest. He was a true friend; ambitious to advance himself in his profession, but he was handicapped, as I have told you, by an organic heart lesion that finally ended his career. Concerning his later life in medicine, some of you in that section know him better; but I will say that you never knew a truer and better friend, a more conscientious physician and citizen.

Dr. W. T. Wootten, of Hot Springs: I want to refer to the passing away of Dr. Samuel Paxton Collings, of Hot Springs, whom it has been my privilege and honor to know. Those of us who knew Dr. Collings knew him to love him, and those of this Society and of the Mississippi Valley Medical Society and the American Medical Association who knew him will miss him. He was an honorable gentleman in our profession.

Dr. R. H. T. Mann, of Texarkana: I want to introduce a resolution at this time. We have just heard most noble tributes to some of the early members of the Arkansas Medical Society. There has not been a time in the history of Arkansas when the physicians of this State have not done their duty. I hope there never will be a time. We are now facing a great crisis, and I am sure that the physicians of this State are ready to do their part. I want to introduce a resolution that the president and the secretary of this Society send a telegram to the President of the United States and the Senators and Congressmen from this State stating that the Arkansas Medical Society stands ready to do its duty in this crisis. (Applause.)

Seconded.

Dr. M. G. Thompson, of Hot Springs: Would he except Senator Kirby?

Dr. Mann: I do not except anybody. Carried.

President Woodrow Wilson,
Washington, D. C.

Be it resolved, that we, the members of the Arkansas Medical Society, tender to you and our country our services in whatever capacity needed during the war.

M. L. NORWOOD, President,
C. P. MERIWETHER, Secretary.

Dr. Morgan Smith, of Little Rock: I want to make a statement for the information of some of the members of the Society. I have just returned from Washington City, where I was called in conference with the medical committee of the National Council for Defense. The question of speeding up instruction in the medical schools and the early graduation of medical students were the two subjects which were discussed. Some two or three months ago it was the opinion that the early graduation of medical students, who had made 80 per cent of their attendance, and the adoption of a four-quarter system of education probably was necessary. After a census had been taken of the available medical men in the United States for the Army and Navy and the Marine Service, the conclusion has now been reached that there is no emergency demanding the speeding up of medical instruction and the early graduation of students; that the Navy has all of the physicians it needs, and the Army will be supplied as rapidly as organization proceeds. It seems that the country now has about found its balance, and the hysteria has about passed.

Physicians at home can serve their country as patriotically by remaining at their post of duty until called. The thing for us to do is to go forward with our medical education and turn out our students in the regular way, and see that they get hospital instruction to the end that they may serve the nation better. I believe this statement embodies the result of the conference.

On motion, the General Session adjourned.

HOUSE OF DELEGATES

THIRD DAY, THURSDAY, MAY 3, 1917.
MORNING SESSION.

Called to order at 9:10 a. m. Chairman Norwood presiding. Roll call showed a quorum present.

Chair called attention to the fact that Chapter V, Section 3, of the By-laws stipulated that the report of the Nominating Committee should be rendered to the House of Delegates on the morning of the last day of the session.

Dr. Eberle stated that the Nominating Committee was not ready to report, and moved that further time be given, being seconded by Dr. Laws, the motion was carried. The committee was requested by the chair to report to the House of Delegates at 2 p. m.

Secretary Meriwether reported that Delegate Cannon of Hope, had been compelled to go home, thereby creating a vacancy in the Sixth District delegation. The chair requested members and delegates from that territory to confer and select a successor. This was done and Dr. F. T. Isbell, of Horatio, chosen to fill the vacancy. On motion of Dr. Eberle, the meeting adjourned till 2 p. m.

HOUSE OF DELEGATES.

THIRD DAY, THURSDAY, MAY 3, 1917.
AFTERNOON SESSION.

The House of Delegates was called to order at 2:00 o'clock p. m., by the president.

The following telegrams were read by the secretary:

Birmingham, Ala., May 1, 1917.

Arkansas State Medical Society,
In Convention Assembled, Little Rock, Ark.

Greetings. Hope you are having great meeting and everybody having good time. In the name of our great Southern Medical Association I extend to your every member a most cordial invitation to attend our Memphis meeting in November. Come with large delegation and help us make it a glorious success. SEALE HARRIS.

Marshall, Ark., 9:45 a. m., May 3, 1917.

President of the Arkansas Medical Society,
Little Rock, Ark.

As delegate of the Searcy County Medical Society impossible for me to attend. Accept greetings and good wishes. E. W. WOOD, M. D.

President: The next order of business is the report of the Reference Committee.

Dr. E. F. Ellis, of Fayetteville. To my surprise, I find Dr. Kittrell and Dr. Cooper both gone away, so it leaves me to make the report.

We, the Reference Committee, wish to submit the following:

Report on Dr. John S. Shibley Memorial Tablet—We recommend its adoption as read by Chairman Dr. L. P. Gibson.

Report of Legislative Committee shows some lack of interest on the part of the profession in securing some needed legislation. The committee was unable to secure any legislative enactments asked for at the last Legislature.

We advise adoption of report of Scientific Program Committee but believe it not best to adhere to the precedent insofar as confining the list of papers entirely to home talent.

Report of Committee on Infant Welfare is full and complete. We ask that it be read again by all members as we believe much may be accomplished by conserving the life and health of the baby.

E. F. ELLIS, Chairman.

Dr. D. Gann, of Benton: I move that the report be received, and the committee discharged. Seconded.

Secretary: I wish to state on behalf of the scientific program committee that this is not a precedent

that we set this year, but just simply to try out the proposition of having our program made up from the membership of our own State Society. Kentucky was the first State that ever attempted this, and they reported one of the greatest and most successful meetings in the history of their State Society. We did not decide on this as a precedent to set for future scientific program committees, but were just trying it out one time. Now, we have had a great deal of trouble. We have had men from other places that came to our State Society on invitation and read papers. They have, under some pretext or other, carried those papers away with them to correct them or something, read them in other State Societies, and print them in the journals of other State Societies, when the paper was first read before our organization, and were really the property of our Society. When they are read and published in the journal of another society, they are not the property of the Arkansas Medical Society. Two years ago, if you will remember, we had a man come here and deliver an oration on surgery. He read his oration from a reprint that had been published in a private journal a year before, and so placed us in the position that we were not able to publish that at all. And, unless we can control those things, it is not to the credit or honor of the Medical Society to have a paper that we cannot publish in our Journal. Now, that is the position which we took this year, because Dr. Bathurst and I have been up against this for the past five or six years. And, we thought that we would attempt it this year and pass it up to you men to find out and know from this meeting whether it has been successful.

Now, there is one other little thing that I want to mention in regard to this report, in justice to myself. That is the report of the Committee on Infant Welfare. They made a report which was published in last month's Journal, saying that they had had notice of only three months prior to this time of their appointment. A list of all the committees were printed in the September Journal. Prior to two years ago, it had not been the custom for the secretary to write an individual letter to the various members of the committees of their appointment; but for the past two years it has been done. Now, I wrote each member of all the committees in October of the appointment, which was six months prior to the time that we received this report. This report was received on the 11th day of April, when 30 days prior to that time I had asked the report from all the chairmen of the various committees to be in my hands on or before April 1st, to comply with the resolution that was passed at the Texarkana meeting, at which time a resolution was adopted calling on all the chairmen of the various committees to make their reports in writing, so that they could be published in The Journal thirty days prior to the annual meeting. Now, to show you that this committee had received this report, they had organized, on November 16th I received the following letter from the secretary of this committee:

Dear Sir:

As secretary of the Infants Welfare Committee of the Arkansas Medical Society, it will be necessary to carry on considerable correspondence for the next few months. Therefore, the committee has authorized me to write you for stationery for this work. I understand it is the custom of your office to furnish the stationery necessary for committees of this nature. I am enclosing a suggestive headline for this stationery, at the same time requesting you to make whatever changes you feel advisable. We have concluded to go into this work in a very energetic manner, not only to secure data from all sections of the State, but to do what we can in an effort to establish organizations in different counties over the State. We have in El Dorado a Child's Welfare organization with a number of very enthusiastic workers, many of whom are also very active workers in the Federation of Women's Clubs. These leaders have agreed to cooperate with us in securing the data and furthering organization work throughout the State. We would like to have a thousand letter heads and envelopes.

(Signed) H. H. NEIHUSS.

On the bottom of this letter, it says, "Doctor: We have written Dr. Clegg for an expense allowance not to exceed $100. I wish you would write him a line about the same. It will require an immense amount of correspondence," and so on.

Here is the reply that I wrote to Dr. Neihuss, dated November 20th:

Dear Doctor:

Yours of November 16th received Saturday, and as I was very busy I didn't get a chance to reply to you. The Arkansas Medical Society has never provided an expense account for any of its committees. Frequently, however, committees have incurred a small expense for stationery and such like, which has always been paid by order of the council at the annual meeting. I would advise you to go ahead and have your stationery printed just as you would like it, and I am sure the council will take care of it. As you know, the committee on medical legislation every two years does an immense amount of work, frequently coming to Little Rock as many as half a dozen times during the meeting of the Legislature, and no committee to my knowledge has ever requested to be reimbursed. I am sure, however, that the council will take care of a bill for stationery for your committee.

Wishing you every success in this work, I am

Sincerely yours,

I would not have read this at all had it not been for the fact that this report was published in last month's Journal, and they stated that they had not had any notice of their appointment until three months prior to the meeting. And, I do this in justice to myself.

Dr. J. G. Eberle, of Fort Smith: As I understand that report as read by the chairman, it does not compel the committee in arranging the program to take in only home talent. They do not set that as a precedent. Now, I think this has been one of the best meetings we have ever had of the Arkansas Medical Society. (Applause.) The program has been made up of home talent. Some of the papers might not have been scientifically as deep as we would have gotten them from outside men, but they have been practical, they have been sincere and they have done good. I would not like to cut the committee on scientific program out from doing the same thing again if they thought best. Still, it should be left open to them. If they can get a good man from abroad, who would take an interest in the meeting, get him.

President: As I understand, adopting this report does not mean that future scientific program committees have to be governed by that at all; its just simply a recommendation, and it is left up to the committee, just as heretofore.

The motion to adopt was carried.

REPORT OF THE NOMINATING COMMITTEE.

Nominations for President—Dr. Wm. Breathwit, Pine Bluff; Dr. C. H. Cargile, Bentonville; Dr. J. B. Roe, Newark.

First Vice President—Dr. H. A. Stroud, Jonesboro.

Second Vice President—Dr. T. F. Ellis, Fayetteville.

Third Vice President—Dr. W. W. York, Ashdown.

Secretary—Dr. C. F. Meriwether, Little Rock.

Treasurer—Dr. Wm. R. Bathurst, Little Rock.

Delegate to the American Medical Association—Dr. Wm. T. Wootten, Hot Springs.

Alternate—Dr. T. F. Kittrell, Texarkana.

Councilor, First District—Dr. J. H. Stidham, Hoxie.

Councilor, Third District—Dr. H. H. Rightor, Helena.

Councilor, Fifth District—Dr. Foster Jarrell, Huttig.

Councilor, Seventh District—Dr. J. E. Jones, Sheridan, Grant County.

Councilor, Ninth District—Dr. Leonidas Kirby, Harrison.

Dr. H. H. Thibault, of Scotts: As there is only one name for the rest of the offices, except the president, I move that the secretary be authorized to cast the vote of the Society for all the officers except the president, and then let us ballot on the three names for president.

Seconded. Carried.

On the first ballot, Dr. Wm. Breathwit, of Pine Bluff, was chosen as president, and so announced by the secretary, the result of the ballot being as follows:

Dr. Wm. Breathwit, 29; Dr. C. H. Cargile, of Bentonville, 21; Dr. J. B. Roe, of Newark, 5.

Secretary: I have some letters and telegrams I would like to present.

Arkansas Medical Society,
Little Rock, Ark.
Gentlemen:

The City of Eureka Springs, through its three commissioners, Chairman F. O. Butt, Mr. Wm. Kappen and Mr. H. Goudelock, have requested us, the Commercial Club of Eureka Springs, to cordially invite you to hold your 1918 Convention at Eureka Springs, Arkansas. Representatives of our city will bring this matter to the attention of your Society, after the reading of this invitation, and we bespeak success.

Assuring you that Eureka Springs will meet your wishes in every way consistently and trusting that we may be successful in our effort to secure your next annual meeting, we beg to remain,

Yours very truly,
THE COMMERCIAL CLUB,
By Wm. Duncan, President,
Phin T. Swett, Secretary.

Pine Bluff, Ark., 2:55 p. m., May 1, 1917.

President Arkansas Medical Society,
Old State, House, Little Rock, Ark.

Pine Bluff wants your convention next year and sure wants it badly. Come to us and we will make it your banner meeting in point of attendance and pleasure. We want your delegates to see our splendid hospitals, three, drink our pure water and travel over more miles of modern pikes than any other locality can offer; see how we have rid ourselves of danger from poor sanitary and malarial conditions. There is nothing that we can do to make the convention pleasant and profitable that we will not cheerfully do.

PINE BLUFF CHAMBER OF COMMERCE,
E. B. Bloom, Secretary.

Hot Springs, Ark., May 2, 1917.

Officers and Members Arkansas Medical Society,
Hotel Marion, Little Rock, Ark.

The Business Men's League on behalf of the city of Hot Springs most cordially and sincerely invites you to hold your 1918 convention in this city, world's greatest health and pleasure resort. We have every facility to assure you a most successful meeting. Our citizenship will appreciate your presence here.

BOARD OF GOVERNORS,
Gus Strauss, President,
Walter M. Ebel, Secretary,
Business Men's League.

Jonesboro, Ark., May 2, 1917.

President State Medical Society,
Little Rock, Ark.

Jonesboro extends you most cordial invitation to select this your 1918 convention city. We will deem it a great honor and certainly you will like Jonesboro. Ample convention facilities.

JONESBORO CHAMBER OF COMMERCE.

Jonesboro, Ark., May 2, 1917.

Dr. J. C. Hughes,
Care State Medical Society,
Little Rock, Ark.

We want 1918 convention; will appreciate your efforts. Will do all possible for your proper entertainment. Select Jonesboro by all means.

JONESBORO CHAMBER OF COMMERCE.

Eureka Springs, Ark., April 28, 1917.

The Secretary, Arkansas Medical Society.

The city of Eureka Springs through its Board of Commissioners and the Eureka Springs Commercial Club extends to your association a cordial invitation to hold your 1918 convention in Eureka Springs. We believe by choosing our city you will be doing not only the city an excellent service but you will find your experience satisfying.

THE BOARD OF COMMISSIONERS,
By H. Gaudelock, Secretary.

THE COMMERCIAL CLUB,
By Wm. Duncan, President.

Dr. W. V. Laws, of Hot Springs: In addition to the invitation of the Business Men's League, I wish to extend an invitation from the Hot Springs-Garland County Medical Society, asking you to meet with them next year. I think we are better prepared than ever to take care of you. I think we always heretofore have given you a good time, and I think we can give you a better time if you come next year than you ever had before.

Dr. H. H. McAdams, of Jonesboro: I come here with power vested in me from every institution in our town to invite you to Jonesboro for our next meeting in 1918. I come here, vested in me, the power from the First District Medical Society to invite you to come to Jonesboro for our next meeting. I also come here with the power vested in me from our own county society to invite you to meet with us in Jonesboro in 1918. I have just talked this matter over with Dr. Laws, and he says it does not matter with him particularly where we meet at,—he would just as soon meet at Jonesboro,—but he was forced to put in his claim. So, I think all the Hot Springs delegates will vote to come up to Jonesboro. I will just say this much in behalf of the citizenship of Jonesboro and in behalf of the profession of Jonesboro: if you come up to Jonesboro in 1918, we will do our dead level best to show you the best time that we can, and we will appreciate having you with us.

Mr. R. R. Thompson, of Eureka Springs: I am glad of an opportunity to extend again the invitation that has been extended by our Eureka Springs Commercial Club, by the Commissioners of Eureka Springs and also by the physicians of Carroll county, who want very much to have the convention of your Society in Eureka Springs next year. Now, I am aware that it is customary to have this convention in the central part of the State in alternate years, and I am aware, too, that the central part of the State usually gets the benefit of the talent that comes to it on account of its being central. And, anticipating the objection, and the only objection, so far as I know, that can be made or will be made against settling upon Eureka Springs as the convention place next year, I know it will be insisted that Eureka Springs is inaccessible, in a measure. But, I just want to appeal to you gentlemen, on behalf of our people, not to give that matter so much weight and importance, as a number of other societies and organizations do in the State, because, while Carroll county is a distant point from the central part of the State, it is yet in the State.

Now, the main argument for settling upon Eureka Springs as your next convention place is the fact that Eureka Springs—even, if we admit what the delegate from Hot Springs said—he didn't say it, but someone else said that it was the greatest health and pleasure resort in the world—admit that. Eureka Springs is a health and pleasure resort that is worth while, and we want especially that the physicians of this State know more about it than they do. There are some features about the water and the climate there that we insist that the physicians must know, if the people of our State and in other States who are to get the benefit of what we have to offer, for we are dependent upon the physicians to let the public know.

Now, Mr. Chairman and gentlemen, I come here with a promise of this kind from our commercial club and our board: that we want to pledge ourselves to give free medical attention for two months at least to five patients to be selected by your body as you choose within the next six months, and, in order to give us an opportunity of showing what can be done for those patients, it is specified that the patients that you select shall be men or women who are suffering from kidney diseases. We want you to give us an opporutnity for sixty days of allowing these patients to drink our water and breathe our air, and we further pledge you that we will see to it that our Pzarka water is shipped to those patients for two months later after they go home, without

charge, the water from our springs, and then we promise also to have equipped all the laboratory that you want for bacterial analysis and chemical analysis of our water, and to make an exhibit of the water at your next convention in Eureka Springs. And I believe that it is well worth your while to make some capital of what, in our opinion, is going to arise, so to speak, so far as spreading the benefits of Eureka Springs water and climate to the people that are suffering from this particular trouble.

Now, we are in the corner of the State, and the railroad facilities are not there. To be sure, at present I would say they are good. The General Passenger Agent of the Missouri & North Arkansas, who is here with us now, will tell you that they have parlor car service on their through trains; connections from Little Rock are good; you leave here in the morning at nine o'clock and arrive there in the evening, or leave here at nine in the evening, around by Fort Smith, arriving at Eureka Springs in the morning. The facilities are good; the climate is good; the scenery is picturesque; and, furthermore, we are now building roads that, in my opinion, make it possible for any of you to journey there by auto next year. We are in earnest about this, and we want you to lay aside the question of central location on your alternate year, and settle upon Eureka Springs.

Mr. J. C. Murray, of Eureka Springs: As representing the Missouri & North Arkansas Railroad, allow me to say that we will arrange for any service that you may require to get you to Eureka Springs. If you want to leave Kensett, for instance, which is just 50 miles distant from Little Rock, at any particular time, we will arrange for special service and take you up there, and we will give you special rates; give you a very reasonable rate to come up there. And, we feel that Eureka Springs should have some consideration for more than one reason. But the one particular reason is that there are so many people who come to Eureka Springs from outside of the State to be treated for various diseases, principally kidney, who afterwards locate in the State and become citizens of your State, and I would like to ask that you decide on Eureka Springs as your place of meeting for 1918.

The result of the first ballot was: Jonesboro, 18; Hot Springs, 17; Eureka Springs, 17.

Dr. Eberle: I move after the next ballot that the city receiving the lowest vote be dropped. Seconded and carried.

The result of the second ballot was: Jonesboro, 19; Hot Springs, 15; Eureka Springs, 16.

President: Hot Springs will be dropped.

The result of the third ballot was: Jonesboro, 25; Eureka Springs, 23; Scotts, 1; Hot Springs, 1.

President: The Chair will hold that the convention meets in Jonesboro next year.

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

We, your Committee on disposition of president's address, after having heard and carefully read, do heartily concur in the suggestions made therein, especially do we endorse his recommendations on medical legislation increasing the efficiency of our board of health and improving rural sanitation, and the admittance of undergraduates to full membership.

J. C. WALLIS,
F. T. ISBELL,
DON SMITH.

Dr. L. T. Evans, of Mount Pleasant: I move that the report be adopted. Seconded and carried.

Dr. W. R. Bathurst, of Little Rock: As a member of the Committee on Constitution and By-laws, I would like to supplement our report by making one change in Chapter V, referring to the election of officers. The section says: "The report of the nominating committee shall be the first order of business of the House of Delegates after the reading of the minutes in the morning of the last day of the General Session." I would like to change the word "morning" to "afternoon" in that section.

President: It is not necessary to take any action on that. It lays over to the next meeting.

Dr. H. Thibault, of Scotts: At the meeting of the secretaries of the various county medical societies, we had the suggestion made that it would be much better and furnish much more efficient work in the county medical societies if some of the secretaries were induced to carry the burden a little longer; that the secretaryship be not an honorary office, but one of work; that, if you could keep a good man in office in the county society, familiar with the names and addresses and the clinical peculiarities of the membership of the societies, he could hold it together better than by electing a new secretary every year. And, we embodied that in a resolution of the organization of secretaries, but some of the gentlemen thought that it would be rather delicate for them to go home and tell their county societies that they ought to re-elect the same secretary over again. So, they asked me to bring it to the House of Delegates in the form of a resolution. So, in order to side-step the self-preservation part of it, I think I have got that formed so that it will be satisfactory:

Resolved, That, inasmuch as the secretaryship of a county medical society is a duty and not an honorary office;

"It is the opinion of the House of Delegates of the Arkansas Medical Society that the county medical societies can be better served by electing at their next annual meeting a secretary who, among his other good qualities, will be willing to retain his office for a number of consecutive terms; and that a copy of this resolution be forwarded to the presidents of the respective county medical societies.

I move its adoption. (Seconded and carried..

Secretary: I believe that resolution should be put a little stronger; to amend the constitution and by-laws of the county medical societies so as to elect a secretary for a specific term of years; say, two or three years. I just offer that merely as a suggestion.

Dr. Earle H. Hunt, of Clarksville: I want to ask a question: if a resolution was passed asking the societies who entertain us not to have a banquet; one of those expensive banquets.

Secretary: It was passed at the El Dorado meeting.

Dr. Hunt: It works a hardship on those fellows to have those annual banquets. It is too much expense. The meeting is the main thing.

Dr. Eberle: The Nominating Committee recommends that Dr. J. M. Lemons, of Pine Bluff, be selected to act as councilor to succeed Dr. Breathwit, who has been elected president. Adopted.

Dr. Thibault: I move that the secretary be empowered to extend a vote of thanks of the society to the railroads and any other persons to whom we are under obligations for the courtesies shown.

Secretary: A resolution was introduced in the session this morning and carried that a telegram be sent to the president. It is as follows:

President Woodrow Wilson,
Washington, D. C.

Be it resolved, That we, the membership of the Arkansas Medical Society tender to you and our country our services in whatever capacity needed during the war.

(To be signed by the president and the secretary of the Arkansas Medical Society.)

On motion, the House of Delegates adjourned sine die.

GENERAL SESSION.

THIRD DAY, THURSDAY, MAY 3.

The General Session was called to order by the president at 3:30 p. m.

Dr. Earle H. Hunt: The Council desires to report as follows:

Councilors meeting, May 3, 1917. Dr. J. T. Clegg, chairman; Dr. Earle H. Hunt, secretary.

Motion passed asking program committee to have home talent only on the program at the next meeting.

Councilors present, Lemons, Jarrell, Clegg, Jones, Cleveland, Kirby, Hunt.

J. T. CLEGG, President,
EARLE H. HUNT, Secretary.

Dr. C. H. Cargile, of Bentonville: I am not a delegate, but perhaps I have a vote. I think it is not improper to state that the House of Delegates voted unanimously to try home talent for another year, and there are two-thirds as many here now.

President: It is to adopt or reject in order to get it before the house.

Dr. H. H. Kirby, of Little Rock: I move that we adopt the report of the Council. Seconded. Carried.

Dr. L. Kirby, of Harrison: It was understood when we did this that it would not be any impropriety in requesting some one on the outside to have a paper, if they saw fit.

Secretary: It is left entirely to the committee.

President: I appoint Dr. Cargile and Dr. Lemons as a committee to escort the president-elect to the chair. Dr. Roe is not here.

President: I present to you Dr. Breathwit, president-elect for 1918.

Dr. Breathwit: Gentlemen of the Arkansas Medical Society: To say to you that I thank you carries very little of the real expressions of my heart, by making me your president for the coming year and directly connecting me with the history of the Arkansas Medical Society. In an indefinite way I have tried to be connected with its history ever since I was a graduate in medicine. I have done my little as best I could. I met my failures, and I have met my defeats, but I have never lost courage. And, I promise you now that I will do the best I can for you during my administration, but I can say to you again that I can do very little without your cooperation. With your cooperation, we can at least hope to do as much as we have done. If we do that, we are progressing. And, if you will give me your cooperation, and I feel that you will, we will progress as fast as we can. Again, I thank you. (Applause.)

Dr. Don Smith, of Hope: The committee that was appointed to report on the President's Address omitted one thing. Of course, we adopted the report as a whole, but there is one feature that I think we should take some action on, and that was the suggestion of the president that the people in the rural districts are not getting the advantage of any instructions being sent out. Of course, the lay press now is full of instructions along the line of sanitation, but the people in the country don't get hold of these like they should: how to prevent typhoid fever and malaria and other diseases of that sort. Now, the president recommended in his address that a committee be appointed. I don't know why we overlooked that important matter, but we did. I want to make a motion that a committee be appointed by the president to have pamphlets published setting forth how to prevent typhoid and malarial fever and other diseases that are preventable; hookworm and things of that kind; that a committee be appointed to get up this literature and turn it over to the secretary of the State Medical Society, and then distributed to the different county medical societies. I make a motion that a committee of three be appointed to carry this information, to be sent out to the people in the country.

Dr. L. Kirby, of Harrison: I second that motion, and, in doing so, would ask that the president not be put under the strain of at once appointing them, if he wants time to consider it.

President: I think it had better be incorporated in that that an appropriation be made to make this efective. A motion, without an appropriation to back it up, would not avail anything.

Dr. Kirby: The Council will have to do that.

Dr. Clegg: They can't make an appropriation without a vote of the House of Delegates. The Council can prevent an appropriation but they can make no appropriation.

Secretary: There is one point that I want to bring out before this body, and that is the fact of the members who have been endorsed to be appointed on the State Board of Medical Examiners; the State Board meets next week. They have, no doubt, already formulated their questions; their organization is perfected; and, if I make the recommendations prior to the signing of the certificates by the present board, when I place these recommendations in the hands of the Governor and he makes the appointment, then the old members cease to be members of that board. I believe that it should be the concensus of this body that I hold up these recommendations to the Governor until after the board has signed the certificates for the examination that takes place next week. Now, four years ago, the papers published the recommendations, and some of those men were apponited before they were certified in, and it caused some turmoil. I believe the thing to do is not to certify these men in at all until after the present board of examiners hold their examinations and sign these certificates. I would like to hear from Dr. Ellis on that point.

President: Before we take that up, let's dispose of that other motion.

Delegate: I would like to second that motion. Dr. Smith's motion is a very important thing to us country doctors, us fellows who live out in the country, because we have got to get these things before the country people, as far as the prevention of typhoid fever and other things are concerned, and, for that reason, if there is any way to get it before this Council, I want to second his motion.

President: The motion has already been seconded.

Dr. Hunt: I would just like to offer a suggestion. In this literature they are going to distribute, particular stress should be laid upon pellagra. I believe we will have more pellagra this year than any other year, because food has been so high during this past winter. In the last ten days before I came down here, I had four cases, and that was more cases than I had all last summer. I would just like to get that in the literature, telling them about the food adulterations that will necessarily come in.

Dr. W. T. Wootten, of Hot Springs: Can we appropriate any money without the House of Delegates voting on it?

President: No.

Dr. Hunt: If they will carry the item until next year, it will be allowed.

President: If they want to carry it as a deficiency, they have that privilege to accept or reject the bill.

The motion carried.

Secretary: I want to have an expression on this proposition of recommendations for the State Board of Medical Examiners, because I don't want to take the responsibility of holding those things up myself.

President A motion would be in order that the secretary be requested to hold them up.

Dr. E. F. Ellis, of Fayetteville: The board is appointed for a specified time. My commission, I think, expires probably the 19th of June, if I remember right. Of course, we hold during the life of that commission, and upon a mere recommendation of the names to the Governor, I don't think, at this time it would be proper for him to appoint. He could make the appointments later. I think Dr. Wallis' term expires in June, as I remember, mine is the 19th of June. This will give the board plenty of time to read all the papers and sign the certificates.

Secretary: I just made this at the suggestion of the secretary of the State Board of Medical Examiners. He said it had been the custom heretofore, as soon as they were filed to make the appointments, and, as soon as the appointments were made, that the others automatically ceased.

President: There is no motion before the House. What is your pleasure?

Dr. Wootten: I move that we adjourn.

Seconded. Carried.

County Societies.

BOONE COUNTY.

(Reported by F. B. Kirby, Sec'y.)

The Boone County Medical Society met in Harrison on June 5. Present: Drs. N. L. Barker, president; D. E. Evans, J. H. Fowler, J. J. Johnson, C. M. Routh, L. Kirby, J C. Blackwood and F. B. Kirby.

Dr. L. Kirby read a paper on "Empyema," reporting a case of a man forty-two years of age who had been operated upon in a hospital in California. After about three days the nurse informed the attending surgeon that the drainage tube was missing. The doctor probed the chest cavity and said he could not find the rubber drainage tube. Four months afterward, at Harrison, Ark., after enlarging the original opening at the seventh rib in the left mid axillary space, and inserting finger, found and removed a rubber tube three-eighths of an inch in diameter and four and seven-eighths inches long. The tube had a medium-sized silkworm gut suture stitched through it near one end; there was a free end of the gut five-eighths of an inch long. This free end of silkworm gut had frequently stuck into the patient, causing acute pain. The discharge of pus was very offensive. The consensus of opinion was that the patient might recover. A surgeon should be very particular in anchoring a drainage tube, and that probably large safety pins inserted through the end of the tube would be safer than threads through skin and tube.

All the other doctors reported cases.

ASHLEY COUNTY.

(Reported by J. C. Simpson, Sec'y.)

Members of the society met at the McCombs Hotel at Hamburg, June 6, and were served with a five-course banquet, after which the regular quarterly meeting was held in the parlors of the hotel.

Meeting called to order by the president, Dr. A. E. Cone of Portland.

Minutes of last meeting read, corrected and approved.

Moved and carried that the state and county society dues of Dr. E. C. McGehee, who is at present in the tubercuIosis sanitarium at Booneville, be donated by the society.

Program: "Vital Statistics," Dr. B. F. George; "The Fly as a Carrier of Disease," Dr. F. M. Sherrer; "Malaria and Mosquito-borne Diseases," Dr. H. A. Taylor; "Notifiable Diseases," Dr. J. W. Simpson; "Report of Arkansas Medical Society Meeting," Dr. J. C. Simpson.

The above subjects were fully discussed by members present.

Moved that a resolution be written by the secretary concerning our loss of Dr. W. H. Shipman as a member of the society, who is leaving soon for Oklahoma.

Portland was selected as the place of next quarterly meeting.

Dr. W. H. Lindsey was a welcome visitor at the banquet and meeting.

POPE COUNTY.

(Reported by J. R. Linzy, Sec'y.)

The Pope County Medical Society met at Russellville May 21, 1917, in the mayor's office, at 1:30 p. m. Present: Drs. Jerome Wright, president; J. R. Linzy, secretary; J. M. Campbell, J. F. Hayes, J. W. Powell, C. A. Haney, L. Gardner and J. M. Drummond.

Dr. Linzy reported a spontaneous case of Raynoud's disease that was of such severity that it necessitated amputation of both one arm and one leg, patient recovering.

Dr. J. F. Hays reported a case.

The following resolution was adopted, asking the health officer to go before the City Council and ask that body to investigate the condition of the city water.

The meeting adjourned to meet at Russellville on June 7.

Russellville, June 7.—The Pope County Medical Society met at Russellville in the mayor's office, June 7, 1:30 p. m. Present:

Drs. J. Wright, J. M. Campbell, R. M. Drummond, L. Gardner, J. C. Witt, L. D. Berryman and J. R. Linzy.

Dr. J. M. Campbell was elected to fill the vacancy of vice president.

Dr. Gardner read a paper on "Acute Coryza." Discussed by Drs. Linzy and Berryman.

The subject of Dr. Wright's paper was "Measles." Discussed by Drs. Berryman and Drummond.

The meeting adjourned to meet in Atkins on July 10, at 1:30 p. m.

Book Reviews.

A Manual of Nervous Diseases, by Irving J. Spear, M. D., Professor of Neurology at the University of Maryland, Baltimore. 12 mo. of 660 pages, with 169 illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $2.75 net.

In this book we find each disease described as clearly and briefly as possible, with special attention given to differential diagnosis and treatment.

The Medical Clinics of Chicago, Volume II, No. 5 (March, 1917). Octavo of 227 pages, 40 illustrations. W. B. Saunders Company, Philadelphia, 1917. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

A very interesting article in this issue pertains to the great importance of anaphylaxis clinically and therapeutically. Frederick Tiec of Cook County Hospital deseribes briefly some of the phenomena associated with this condition, and then presents a few illustrative cases. Contributions have been furnished from twelve other clinics.

A Text-Book of General Bacteriology.—By Edwin O. Jordan, Ph. D., Professor of Bacteriology in the University of Chicago and in Rush Medical College. Fifth edition, thoroughly revised. Octavo of 669 pages, fully illustrated. W. B. Saunders Company, Philadelphia, 1916. Cloth, $3.25 net.

We find in this, the fifth edition, that a number of insertions and additions have been made, including a new chapter on typhus fever. The newer modes of procedure on the testing of disinfectants have been rewritten. Also, the important recent work on the varieties and distribution of pneumoeoeei is considered.

The Practical Medicine Series.—Comprising ten volumes on the year's progress in medicine and surgery, under the general editorial charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University School.

Obstetrics, Volume VII. Edited by Joseph B. De Lee, A. M., M. D. Price, $1.35.

Materia Medica and Therapeutics, Volume VIII. Edited by George F. Butler, Ph. G., A. M., M. D. This volume includes Preventive Medicine, edited by William A. Evans, M. S., M. D., LL. D., Ph. D. Price, $1.50.

Skin and Venereal Diseases, Volume IX. Edited by Oliver S. Ormsby, M. D., and James H. Mitchell, M. D. Price, $1.35.

Nervous and Mental Diseases, Volume X. Edited by Hugh T. Patrick, M. D., and Peter Bassoe, M. D. Price, $1.35.

Series 1916. Published by the Year Book publishers, 327 S. La Salle Street, Chicago. Price of series of ten volumes, $10.00.

These books are published primarily for the general practitioner; at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

Botanic Drugs: Their Materia Medica, Pharmacology and Therapeutics. By Thomas S. Blair, M. D., editor Medical Council; author of "Public Hygiene," "A Practitioner's Hand-book of Materia Medica and Therapeutics," and "Pocket Therapeutics;" formerly neurologist to Harrisburg (Pa.) Hospital. Large type, fully indexed, 394 pages. Price, $2.00. Therapeutic Digest Publishing Company, Cincinnati, 1917.

Blair has presented in this book in concise form a convincing argument for the restudy and enlarged use of galenieals. He is a trained pharmacologist as well as an active praetitioner of medicine. He is thus competent to weigh the evidence presented from the researeh laboratory and that of the bedside. The author frankly admits he "realizes the faet most acutely that it is quite impossible, in our present state of knowledge, to prepare a truly scientific text" on the subject. But this deplorable state is, in a measure, a reproach to modern medicine. Galenieals have been used empirieally for over 3,000 years, and their scientific study is a common duty. All of the botanic drugs in common use are described, with a critical review of their therapy. The exact dose is given, how best employed, and the distinctions in the use of allied drugs are gone into thoroughly. While there is evident a strong note of personal predilection owing to intimate study of various galenicals, the author is fair in giving due credit to the opinions of others. Blair's book is one of the most practical, sensible and dependable yet published on the subject.

Stanolind

Trade Mark Reg. U. S. Pat. Off.

Liquid Paraffin

(Medium Heavy)

Tasteless — Odorless — Colorless

In Treating Hemorrhoids

STANOLIND Liquid Paraffin, used regularly, very generally relieves hemorrhoids and fissure, even when of some years' standing.

Since these morbid conditions are usually the result of constipation, and are aggravated by straining, Stanolind Liquid Paraffin aids by rendering the intestinal contents less adhesive, by allaying irritation and thus by permitting the diseased tissues to become healed.

Where a contraindication for operative treatment exists, the use of Stanolind Liquid Paraffin in these conditions will frequently give relief from distressing symptoms and may even permit the parts to be restored to a condition where operative procedure may be postponed.

The ***special advantage*** of Stanolind Liquid Paraffin lies in the fact that its beneficial effects are not diminished by continual use, as is the case with almost any other laxative.

Stanolind Liquid Paraffin acts by lubrication and by adding bulk to the indigestible intestinal residue.

A trial quantity with informative booklet will be sent on request.

Standard Oil Company

(Indiana)

72 West Adams Srreet

Chicago, U. S. A.

75

WILLIAM BREATHWIT, M. D.,
President Arkansas Medical Society, 1917-1918.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., JULY, 1917 No. 2

Original Articles.

FIBROID UTERUS IN THE YOUNG WITH REPORT OF CASES.*

BY E. L. BECK, M. D.,
Texarkana.

Fibroid tumors of the uterus are benign, but not harmless. They undermine the health and shorten life by hemorrhage, interfere mechanically with the functions of the vital organs, may become septic, and undergo transformation into sarcoma.

Uterine fibroid tumors originate in the walls of the uterus, and are composed of elements similar to the normal structure of the uterine walls. Connective tissue and muscular fibers are found in varying proportions. There are several varieties of fibroid tumors, termed as fibroma, myoma, fibromyoma, and myofibroma, and the natural history of these varieties is practically the same, hence the common term fibroid tumor will serve to designate the neoplasms under consideration.

These growths vary in size from a small nodule not much larger than a mustard seed, to an immense mass weighing more than one hundred pounds. They are rarely found single, though one or more may grow more rapidly than the others, and present the appearance of a rounded or nodular tumor. They are usually classified according to their relation to the normal uterine structure. When situated in the walls of the uterus, they are called interstitial; when growing outward beneath the peritoneum, they are termed subserous, and when projecting into the cavity of the uterus, they are spoken of as submucous. When starting from the supravaginal cervix and growing outward between the folds of the broad ligaments, they are called intraligamentous. The tumors grow in the direction of the least resistance, and may be so connected with the uterine wall as to become pedunculated, and as a result of pressure, atrophy, or traction, the pedicle may become twisted thereby causing gangrene. When the tumor begins near the uterine mucosa, and grows beneath that membrane, it may protrude into the uterine cavity, forming a pedunculated tumor. This is termed a fibroid polypus, and such a tumor will gradually adapt itself to the form of the uterine cavity. Its presence excites uterine contraction, and it will finally be forced through the cervix into the vagina. Sloughing is very common in a case of this kind, and the vascular supply is lessened. The fibroid polypus is more frequently found singly than any other variety of the fibroid tumor.

Fibroid tumors vary in consistence from the soft, almost jelly-like myofibroma, to the hard nodules almost wholly calcified. As a rule, they grow slowly, but in exceptional cases they increase in size as rapidly as ovarian tumors. They frequently cease to grow after the menopause, but sometimes they increase in activity after that change. In some instances, the tumor reaches a certain growth and remains inactive, while in other cases, it steadily increases until the entire abdominal cavity is filled, and serious symptoms are caused by pressure. During menstruation and pregnancy tumors increase in size, but after parturition, a tumor that was conspicuous becomes barely perceptible.

Some pathologists maintain that uterine sarcoma almost invariably begins in degeneration of a fibroid tumor. Dr. Nettie Klein, our pathologist at the Texarkana Sanitarium, has corroborated this finding in several of my cases. Clinical observation has so far confirmed this view that fibroid tumors are usually regarded as predisposing to sarcoma. Carcinoma is sometimes associated with fi-

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

broid tumors, but as carcinoma most frequently occurs in the cervix and fibroids in the body of the uterus, it cannot be claimed that fibroids are disposed to undergo carcinomatous changes.

Hemorrhage is probably the most conspicuous symptom of fibroid tumor of the uterus, and while it is found in most cases, it is not always present. Large interstitial and subserous tumors may exist with no hemorrhage, and small subserous tumors may present no symptoms whatever. The hemorrhage may occur as a continuous uterine hemorrhage, or it may appear as a profuse and prolonged menstrual period; it may be sufficient to exhaust the patient, or only severe enough to produce a slight degree of anemia. The increased area and diseased condition of the endometrium account for the hemorrhage. Pain is a common symptom, and as it is a result of different causes, it accordingly varies in character. Pain caused by pressure depends more upon the location than to the growth of the tumor, and when the tumor arises from the lower uterine segment and fills the pelvic cavity, the pressure upon the bladder, bowel and nerve trunks causes more severe pain than when the tumor rises free above the pelvic brim. The continued pressure upon the bladder causes vesical irritation; pressure upon the bowel induces constipation and hemorrhoids, and endometritis, salpingitis, and peritonitis are frequent complications, and cause continuous and severe pain. The bladder and urethra may be so distorted due to the growth of a fibroid tumor, that the urine is voided with much difficulty and pain.

Uterine fibroids are common both to the white and black races, but probably occur more frequently in the latter. These tumors are among the most common of all diseases peculiar to women; they are found in both nulliparous and multiparous women. It is a well established fact that all uterine fibroid tumors arise during the menstrual period of life. This period has an average of about thirty years, usually from the fifteenth to the forty-fifth year. There are, however, few reliable records of fibroids being found in the uterus before the twentieth year. Submucous fibroids have been removed from girls of eighteen years, and many examples have been reported between the twentieth and twenty-fifth years. Between twenty-five and thirty-five fibroids are fairly common, but the greatest frequency occurs between the thirty-fifth and forty-fifth years. Doran has described some interesting cases and collected the literature, and he points out that they have been frequently observed as early as the twentieth year. Bland Sutton removed from the uterus of a woman twenty-three years of age a fibroid measuring fifteen cm. in its major, and five cm. in its minor axis.

With the improved technic of modern pelvic surgery, the operation for the removal of uterine fibroid tumors has been so perfected that palliative and expectant methods of treatment have been superseded by surgical intervention. Scott says electricity does not arrest the growth of these tumors, and the results claimed for it as a hemostatic have not been verified by general experience. Electro-puncture has proven harmful instead of effective, due to the traumatic peritonitis following this procedure. In skilled hands, and especially with the modern hospital facilities, the mortality of operations for the removal of these growths has been reduced quite as low as that following operations for the removal of ovarian tumors.

While the palliative methods of treatment may prolong life and alleviate symptoms, surgical treatment alone can offer permanent relief and cure. The adaptation of the operative procedure to individual cases requires high surgical skill and the exercise of experienced judgment. With the perfected methods of modern surgery the dangers of this operation have been reduced until they are not as great as the dangers connected with the natural progress of these tumors. Surgical treatment is now so safe that it should not be reserved for large tumors, or to small tumors complicated in such a manner as to endanger life, but in cases of fibroid tumor where the general health is affected by hemorrhage and pressure sufficient to cause invalidism, permanent relief should be sought through operation.

The operations which have been devised for the cure of uterine fibroids are (1) removal of the uterine apendages; (2) ligation of the uterine arteries through the vagina; (3) myomectomy, and (4), hysteromyomectomy. The first two procedures have been practically abandoned and myomectomy is practiced whenever conditions warrant it, but usually in cases of multiple fibroids, and in cases where the uterus is distorted by the growth, hysteromyomectomy is indicated.

He has been seen at weekly intervals since and there has been no furter return.

The chief object of this paper is not so much to discuss tumors in general, as to substantiate my contention that fibroid tumors and fibrinous conditions are entirely more frequent in the uterus of the young than heretofore considered. To this end, I am citing the following few cases:

Case No. 1. Age 24. On opening her abdomen, I found such an extensive mass that I found it necessary to remove the uterus with the tumors. After removal, these tumors were dissected out, and we found nineteen tumors, varying in size from that of a large hen egg, to five or six times that size. Her history showed that she had been carrying this mass of tumors from five to seven years.

Case No. 2. Age 21. Upon operation, I found the uterus so completely covered exteriorly, and the body of the uterus was so completely involved, that I found it necessary to remove the entire organ. This patient had from forty to fifty tumors, mostly small in size.

Case 3. Age 22. This patient gave a history of having suffered from hemorrhage for seven years. She had been under the care of some of the best doctors in south Arkansas, and had been curetted repeatedly with the hope of controlling this hemorrhage. This treatment proved ineffective and the doctors in charge concluded that fibroids were present. The patient was considerably emaciated and anemic. When I opened the abdomen, we found a large fibroid involving the fundus, and I did what I would see fit to call a "wedge-shaped" hysterectomy.

Case No. 4. This patient was a married woman, eighteen years of age. She had been married two years, and had suffered from hemorrhage for about two years. I did a myomectomy, and found a submucous fibroid something larger than an ordinary goose egg. I will not burden you with a long history of these cases after operation, except to say that the results in each case were satisfactory. In further proof of this contention, will say that I find fibroid tumors common in younger women, as well as older ones; when I open the abdomen for other conditions it is not out of the ordinary to find one or more subserous tumors on some part of the uterus.

DO YOU KNOW THAT

Keeping healthy is a part of doing "your bit"?

HEMATOMA OF THE SKULL.*

By H. H. Rightor, M. D.,
Helena.

I report the following case, hoping it may be of some interest, owing to the fact that it is quite unusual:

A negro boy, ten years old, while walking, fell, and his head struck the frozen ground. No unusual pain was experienced and no further attention was paid to the matter; but a week following his mother noticed that his head was swollen. The swelling gradually increased until he was brought to me over two weeks after the fall.

Examination at that time showed an enormously swollen head. There were no signs of contusion or laceration. The entire scalp, extending anteriorly to the eyebrows, laterally to the point where the external ear is attached, was a soft fluctuating mass. There was no tenderness and had been no pain at any time. Appetite good; temperature and pulse normal; no sensory or motor paralysis; eye grounds normal.

The diagnosis was self-evident—an enormous subaponeurotic hematoma.

In early childhood the aponeurosis of the occipito-frontalis muscle which forms the lowest layer of the scalp is very loosely attached to the peri-cranium, or outer periosteal covering of the skull bones. This sub-aponeurotic space is composed of loose and delicate cellular tissue. In infants, this tissue is quite vascular, and in this case it must have remained so. A small blood vessel was evidently ruptured at the time of the fall which continued to bleed, burrowing until the entire scalp was dissected loose from the peri-cranium.

I aspirated just above the outer edge of the left eyebrow and drew off through a single puncture all of the blood. It measured a quart.

Head was tightly bound with skull cap bandage and adhesive plaster. As he lives some thirty miles in the country, he was told to report in a week.

At that time the same condition obtained as at first except that his head was not so large. A pint of blood was aspirated and head bandaged as before.

He returned a week later and four ounces of blood was drawn off.

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

PARAFFIN TREATMENT FOR BURNS.

By NOLIE MUMEY, M. D.,
City Hospital, Little Rock.

The treatment of burns of the severe types have been very unsatisfactory as to the ultimate results; due to infections and degenerative changes in the organs of the body. This was perhaps partly due to an improper dressing and protection of the growing tissue. A fact which is responsible for the enthusiasm among the profession by the use of the various paraffin preparations, which has developed from the World's War of Science.

The preparation was discovered by Dr. Berthe de Sanderfort by accident. It has been said that he was a sufferer from rheumatism and went to Dax, where he received treatment of hot mud poultices. After returning he was unable to get the Dax Mud, therefore originated the idea of using paraffin and a resin oil. Some years later he went to China in the railway service, where a large number of burned cases were brought in for treatment. He then began using the paraffin resin oil, cleansing the wounds and then sealing them up with this preparation with astounding results. In 1914, when he returned to France, he offered his services to the War Department for the treatment of burns and was refused consideration; but was later recognized by having all burned cases sent him for treatment. due to his persistent desire to accomplish something along this line. Cases were treated whenever opportunity presented and he even put beds in his quarters for this purpose. Now he has at his command the St. Nicholes Hospital at Issy-les-Moulineaux, which is near Paris. Dr. Berthe called this new product "Ambrine," and it is being marketed under the name of "Thermozine" and "Hypothermine," and according to an-

Fig. I.

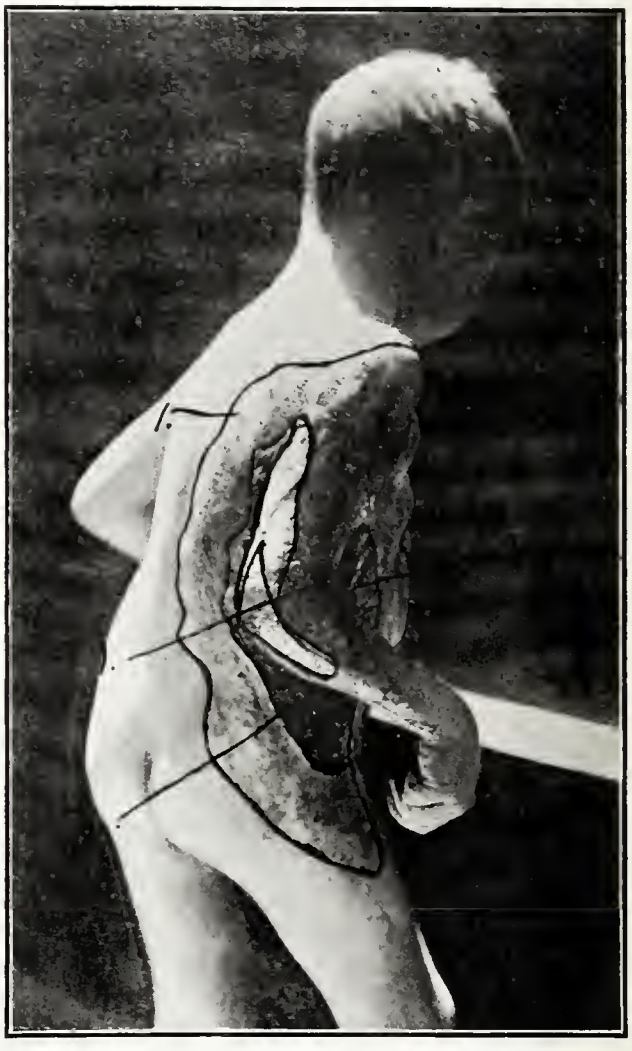


Fig. II.

alysis in the laboratory of the A. M. A., it has the following formula:

Paraffin	97 %
Fatty Oil	1.5%
Asphalt-like Body	5 %
Undetermined	1 %

In this country preparations are being manufactured that have for their base paraffin, which is an odorless, colorless, wax-like substance, produced by the distillation of coal and the residue of gasoline and other oils. Its properties in the treatment of burns depends upon the low degree of melting point, pliability, adhesions and hardness.

In offering the following method for treatment of burns with paraffin film, I only hope to offer a few facts in this method and do not want to advocate the use of any given formula. The following mixture gave good results:

Paraffin	$\frac{1}{3}$ lb.
Oil Eucalyptus 40 m.	2%
Pierie acid crystals, Gr. x	0.5%

This is mixed, liquified and allowed to stand over night before being used.

As to the various brands of paraffin that have been recommended, I can say nothing, only that I used the so-called "Waxfine" and "Parawax," put up in household packages, there being no determinable difference between the two.

Antiseptics.

The use of the various antiseptics in the paraffin mixtures has been discarded by some who think they have no value. Pierie acid is a well known antiseptic and epithelial stimulant and has long been used in the treatment of burns. While slightly soluble in paraffin leaves some residue. The oil of eucalyptus gives odor and is a soothing antiseptic.

Technic for Applying.

The various mixtures are applied by either spraying or with an atomizer, electric fan or painting with a brush, the latter being a very painful procedure, due to friction over denuded nerve endings. This has resulted in the use of liquid paraffin for the first coat.

At the suggestion of Miss Viola Lee, R. N. I immersed the brush in the hot paraffin and allowed it to drop on the burned area. This produced very little or no pain. The surrounding unburned area was protected with towels; for it seems to cause more pain on these surfaces. The first coat is applied in this manner and is evened up by brushing over wtih another layer. A thin layer of cotton is then applied, then another layer of paraffin, until three such layers have been applied, which constitute the dressing as is shown in Figure III.

J. D., age six, was admitted to the Hospital on May the 7th this year with an infected, severe third degree burn, of two weeks duration, involving about one-third of

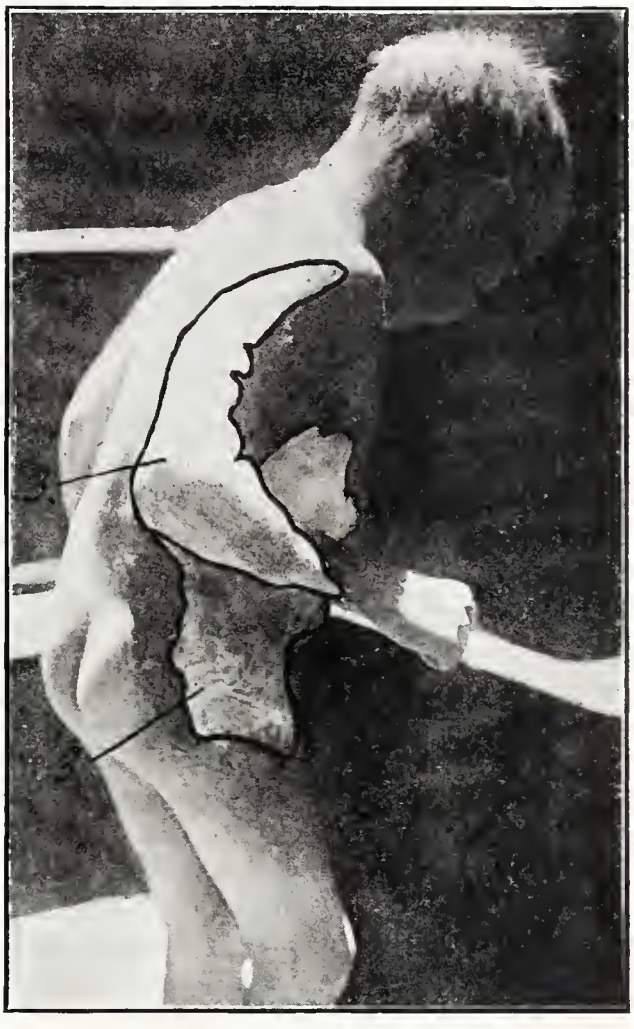


Fig. III.

the body. Temperature was $100\frac{2}{5}$, urine showed a large amount of albumin and a few granular casts. With five days of treatment, the albumin gradually disappeared and the temperature came to normal. The wound began to show small islands of granulation tissue. The results of four weeks of treatment can be seen in the accompanying illustration. (1) In figure two (1) represents the healed areas, (2) represents the unhealed portions.

In conclusion I wish to state that this is an inexpensive dressing, applied with very little pain, affords a protection and splint to the newly formed tissues, prevents deep scars, keeps down pain and odor and obviates doing extensive skin grafting.

REFERENCES.

1. Beiter, J. A. M. A., June, 1917.
2. Editorial, J. A. M. A., August, 1916.
3. Leech, J. A. M. A., May, 1917.
4. Matas, New Orleans Medical and Surgical Journal, April, 1917.
5. Sollman, J. A. M. A., April, June, 1917.

REPORT OF A FRACTURE OF THE LEFT PATELLA OF MR. C. L. B. (WHITE), AGE 26. DATE OF ACCIDENT, AUGUST 18, 1916—2:30 P. M.*

BY J. M. LEMONS, M. D.,
Pine Bluff.

This man was setting blocks on a carriage in a saw mill. A steam carriage, known as a "shot gun feed," which runs very fast, got beyond the control of the sawyer and went swiftly into the bumpers at the end of the carriage track, throwing the block-setter from the rig to the floor of the carriage with great force. When the "smoke cleared up," so to speak, Mr. B. endeavored to get up but was unable to walk. He was picked up and placed on a stretcher and carried to my office, which is about two blocks from the scene of the accident. Upon being questioned as to the location of the injury, Mr. B. stated that he had hurt his left knee. Upon examination, I ascertained that there was a transverse fracture of the left patella. Mr. B. said he struck his knee on the carriage when he fell.

I sent the patient to the Davis Hospital and gave orders for an operation as soon as they could get ready. In just one hour and thirty minutes from the time of the accident, the patient was ready for the operation. By this time the knee was twice its normal size and, after washing same thoroughly with sterile water, soap and alcohol, and painting with tincture of iodine, I made an incision on the inside of the knee joint in the shape of a horseshoe, or semi-circle, and found about four ounces of blood and serum. I cleaned out the cavity and found no hemorrhage to speak of; but found that the patella was in three pieces instead of two, as we had suspected. Consequently, I had to make another incision up from the first incision about one and one-half inches long, to enable me to get hold of the upper pieces of the broken patella. I found that I could get the broken parts together all right; so I drilled a hole in each of the two upper pieces of the patella and two holes in the lower piece of patella. I used an aluminum bronze wire to hold the broken parts together. After getting the several parts properly adjusted, I wiped out the whole of the knee joint with tincture of iodine and sewed up the tissues and muscles with chromicized cat gut and closed the wound without any drainage. I dressed the knee by putting on a posterior splint made of perforated tin, about eighteen inches long, well padded with cotton. I then again painted the knee with iodine and dressed it with a tight-fitting bandage, holding the leg perfectly straight. The wound healed by first intention.

I dressed the knee every day, gently massaging same and moving the patella just a little. At the end of two weeks, the patient left the hospital and went to his home. He then came to my office every other day where I dressed and massaged the knee for four weeks longer.

The patient was using crutches ten days after the accident and, at the end of four weeks, I began to flex the knee every second or third day. At the end of the eighth week he discarded the crutches and used a cane, and I removed the splint. At the end of twelve weeks he was back at his work and used a cane for four weeks after his return to work.

On March 29th of this year, this man fell, striking on this knee, and he thought he had "bursted his knee cap again," as he put it, but upon examination I found that there had been no damage done to his knee. This showed that there was a good union of the old fracture.

If one were not acquainted with the facts of the case, it could not be detected at present by watching Mr. B. walk, that there was anything the matter with his knee.

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

NEXT MEETING OF THE STATE SOCIETY, JONESBORO, MAY, 1917.

Editorials.

OUR NEW PRESIDENT.

Dr. William Breathwit, elected president of the Arkansas Medical Society at the May meeting, is a resident of Pine Bluff. He is a native of Arkansas, having been born at Rowell, Cleveland county, June 23, 1871. He was also educated in his native state, namely at Hendrix College, Conway. He gradated with the highest honors from the Hospital Medical College, Louisville, Ky., on June 19, 1894. On graduating he returned to his home county, where he practiced his profession until December, 1906, when he went to New York. He spent a year at the Manhattan Eye, Ear, Nose and Throat Hospital and at the St. Bartholomew's Hospital. Returning to Arkansas he took up his residence at Pine Bluff, as affording better opportunities for a specialty than his Cleveland county home. He has resided there ever since and has built up a fine practice in diseases of the eye, ear, nose and throat.

Dr. Breathwit takes an active interest in the affairs of his city. He is a member of the Pine Bluff School Board, a member of the First M. E. Church and in Masonry he has attained the Scottish Rite degree and is also a Knight Templar and Shriner. Likewise, he has always found time to actively participate in medical organization, both as a member of his county and State Society. He served last year as Councilor from the Fourth District and his report at the May meeting was one of the best received.

Dr. Breathwit is, in short, an all around good citizen, as well as proficient and progressive in his profession. In honoring him the Arkansas Medical Society has honored itself.

ONE OF THE BENEFITS OF THE DIVISIONAL CAMP.

The selection of Little Rock for the Twelfth Divisional Camp will greatly benefit Little Rock from a material viewpoint, as a large part of the monthly payroll will naturally circulate among local merchants. But that is not all. One of the conditions of securing the camp was that sanitary conditions be improved. To free the camp site of disease carrying mosquitoes and general unsanitary conditions would be of little use if such conditions were not remedied in Little Rock, where the troops would naturally spend much

of their time when off duty. The consequence was a sanitary eampaign in the city. It takes something out of the ordinary to wake cities up to the need of proper sanitation. It took two yellow fever epidemics in suceession to make Memphis a sanitary city after the fatal visitations of 1878 and 1879. In other eities it has taken epidemics of other diseases to accomplish the same results. There is always more or less diffidence which is set forth satirically in the Arkansaw Traveler dialogue in which the denizen of the leaky log cabin says he eannot shingle his cabin when it rains and when it doesn't rain it doesn't need it. Little Rock has been lax in sanitary law enforeement. Much improvement has been noted in the last few years, espeeially in the matters of meat, milk and food inspeetion, including dairies, restaurants and hotels. But the garbage system has never been up-to-date, nor has the sewer question reeeived the proper attention. It is to be hoped that the reforms now instituted will not be temporary but that the garbage be regularly removed or burned, sewer conneetions made and breeding spots for mosquitoes be eliminated permanently. To accomplish these things, however, persisttent and thorough inspeetion is most essential and after inspection the law must be rigorously enforced, without favoritism, to those who fail to observe the rules.

A ONE HUNDRED PER CENT PEOPLE.

It is a pleasing coincidence that the Red Cross campaign for $100,000,000, which immediately followed the conclusion of the Liberty Loan eampaign, resulted in an oversubscription of practically the same pereentage as the oversubscription to the loan.

The American people are well over 100 per cent patriotic and well over 100 per cent generous.

RED, WHITE AND BLUE BOOK.

The Red, White and Blue Book, "How the War Came to Ameriea," has been issued by the Committee on Public Information at Washington. It is of special interest to holders of liberty bonds, as they are assisting in financing the war. It is a doeument all students of this country's affairs should read.

Its contents are 23 pages of introductory historical matter, with the address of President Wilson to the Senate on January 22, 1917, and his address to the joint session of the Houses of Congress on April 2 announcing the severanee of diplomatic relations with Germany and asking that a state of war between the United States and Germany be reeognized.

The traditional policy of the United States, always strietly adhered to, in abstaining from any entangling allianees and partieipation in European controversies is set out ably, with citations of incidents and documents in proof.

The position of the United States in the summer of 1914 is summarized as follows:

"1. The Monroe Doctrine.—We had pledged ourselves to defend the New World from European aggression, and we had by word and deed made it elear that we would not intervene in any European dispute.

"2. The Freedom of the Seas.—In every naval conference our influence had been given in support of the prineiple that sea law to be just and worthy of general respeet must be based on the consent of the governed.

"3. Arbitration.—As we had seeured peace at home by referring interstate disputes to a Federal tribunal, we urged a similar settlement of international controversies. Our ideal was a permanent world eourt. We had already signed arbitration treaties not only with great powers whieh might eonceivably attack us, but even more freely with weaker neighbors in order to show our good faith in recognizing the equality of all nations both great and small."

The attitude of this country toward Germany and the other nations at war is evidenced by the President's proclamation of neutrality and its reception by the people. Questions whieh arose between the entente allies and the United States involved only property and property rights and were covered by arbitration treaties. Questions that arose between the Teutonic allies and this eountry involved irreparable loss of life, and through their refusal to make arbitration treaties were not subjeet to compulsory arbitration.

The eourse of the Imperial German Government in this eountry and in Mexico and other eountries of this hemisphere, its deceit, seeret machinations, and overt aets of hostility are reviewed and the patience and the forbearanee of the President and the Ameriean Government demonstrated.

The pamphlet summarizes the events leading to the entranee of the United States into the war with Germany. The exaet eondition of affairs at the time of the delivery of the President's war message is set out and the eourse of the President and the Nation justi-

fied by the recital of facts now known to all.

The revolution in Russia, it is said, made the course of the United States much plainer and converted the whole conflict into a real struggle that the "world must be made safe for democracy."

Editorial Clippings.

MEDICAL CORPS NEEDS 17,000 MORE DOCTORS FOR THE ARMY.

Surg. Gen. Gorgas, of the Army, authorizes the following statement:

The Medical Corps must have 17,000 more doctors for the Army, and it needs most of them now. In Germany when the army has such a call the Government orders the doctors to join the colors, and that is all there is to it. This government is loath to follow that example. Doctors coming into the Medical Officers' Reserve Corps are commissioned as first lieutenants, captains or majors in the service, and are liable to be ordered to any duty required of their grade. The Surgeon General's endeavor is to put each man where he is most needed and where his specialty will count most.

Foreign Service the Attraction.

Foreign service is the attraction, and it will eventually fall to most of the corps. The examination of recruits and the care of their health through treatment and in a much broader way by sanitation is the matter of earliest importance, and it will be the first duty of many of the new medical officers.

The United States needs more medical officers than France or Germany, because, through lack of universal military training, the difficulties of examining recruits will be multiplied many times, and because we wish to aid our allies and also give the best service to our own soldiers and sailors.

The country needs more doctors now that they may be trained in military ways, in sanitation, and in the surgical methods developed by Dr. Carrel and other surgeons since the war began.

Qualifications Required.

An applicant must be a graduate of a reputable medical school and be between 22 and 55 years of age. The annual pay of a lieutenant is $2,000; of a captain, $2,400; of a major, $3,000; with an additional 10 per cent in each case for foreign service besides quarters. Any physician who intends to join the Medical Officers' Reserve Corps should communicate with the chairman of the board most convenient to him.

Never has there been a greater demand for sacrifice, but it is the sacrifice for country. The country is in the war to win, and no class is more needed at the present time than doctors.

Conditions in England.

The surgeons of England and France need help both at home and in the field.

"English physicians have given themselves to the army so freely," says Col. T. H. Goodwin, R. M. C., "that in some of the more populous districts there is but one physician for 6,000 people left in England.

"The English surgeons have worked desperately. They frequently, after great military engagements, keep their boots on for a week at a time, working 14 and 16 hours a day. But they have learned their lesson; and where at the war's inception they detailed 20 medical officers and assistants to care for the sick and wounded in 500 beds, now with the aid of two more officers they give equally good care to a thousand."

Col. Goodwin, who has been through the war, beginning with the first expedition to France, and the great retreat from Mons, has been detailed to lend his great experience to the United States Medical Corps, and he unfalteringly advises the greatest possible number of medical officers at the earliest date. He flatly contradicts the story that 60,000 English doctors have lost their lives in the service, the total loss not being 2 per cent of that number. There are only 12,000 surgeons in the English Army.—Official Bulletin, published June, 1917, under order of the President by the Committee on Public Information, George Creel, Chairman.

OUTBREAK OF DYSENTERY, ARKANSAS.

Passed Asst. Surg. Preble reports that there is an outbreak of what appears to be bacillary dysentery in Mississippi County, Ark. Many fatalities have occurred, but owing to the absence of records of cases and also of the registration of deaths, the extent of the outbreak has not as yet been ascertained. The outbreak seems widely scattered and to have numerous foci. According to unofficial reports and items in the newspapers, there have been many cases also in Poinsett County, Ark., and in Dunklin and Scott Counties, Mo. The local

undertakers' records indicate that there were 40 deaths during May and June in the town of Blytheville and the neighboring communities. It is probable that there have been at least 400 cases in Mississippi County. Most of the cases have been in children under 5 years of age.

It is reported locally that similar outbreaks have occurred in past years but have been less severe and caused little attention. The outbreak this year is looked upon as being unusually virulent. The fatality rate appears to be about 7 per cent. The present outbreaks are being investigated.—Public Health Reports.

Abstracts.

THE HOSPITAL AND SYPHILIS.

H. R. Varney, Detroit (Journal A. M. A., June 30, 1917), in his Chairman's address before the Dermatologic Section of the American Medical Association at its late meeting congratulates the profession on its broadening views within the last few years as regards treatment of syphilis. The teaching hospital which welcomes to its wards and medical service the syphilitic is embracing the most gigantic opportunity in preventing and treating the most prevalent chronic disease. He speaks especially of the advantages of the closed hospital over the open one for the syphilitic. General hospitals with closed wards for syphilitics should also conduct closed outpatient clinics and a treatment of all syphilis should be under one department and controlled by social service. One great advantage is the continuous service by the same physician which can be instituted, for in no other disease is it more important that the confidence of the patient in his physician should be most firmly established. It is estimated from routine Wassermann tests and clinical observation that from 15 to 25 per cent of patients admitted to all departments of a general hospital are syphilitic, and now that we have at our command a better knowledge of the etiology, methods of early diagnosis and specific treatment of this disease, we should strongly advocate the installing of a more uniform systematic method of medical service in our general hospitals for the control and treatment of the syphilitic.

COLECTOMY.

J. H. Kellogg, M. D., Battle Creek, Mich. (Journal A. M. A., June 30, 1917), holds that, admitting the importance of the colon as an absorber of putrefactive matter as the cause of disease, the question arose in his mind as to whether Metchnikoff was right in his view that it is absolutely a useless organ. Granted that the colon has "gone wrong" and is an offender, is it not possible that it may be reformed and restored to biologic rectitude? With this idea he has labored many years to bring about this result by changing the intestinal flora, increasing peristaltic activity and overcoming stasis by removing mechanical obstacles to colon activity without resorting to surgery by either short circuiting or removal of the colon. The disappointing results of Arbuthnot-Lane's operations have stimulated his activity in this line. Systematic Roentgen-ray examinations made by Case have shown that reflux of fecal material after short circuiting and colectomy is the regular rule and he is confident that cases where they are actually required are comparatively rare provided the patient is given the benefit of rational nonsurgical treatment and, if necessary, less drastic surgical measures. In his experience nine out of ten or even a larger proportion of patients can be cured and kept in good health mainly by dietetic measures without surgical treatment. The seat of difficulty will be found in most cases where nonsurgical measures have failed to benefit a prolapsed and adherent or incarcerated pelvic colon. It is only necessary to break up the adhesions by careful dissection and to prevent recurrence of the difficulty by attaching the pelvic colon to the omentum, which in turn is made fast to the abdominal wall near the umbilicus. The pelvic colon is then suspended by a swinging attachment which does not interfere with its movements or give rise to the pain usually suffered when the colon is attached directly to the abdominal wall. Another operation occasionally but less often indicated is repair of the incompetent ileocecal valve. This is practically always secondary and rarely found except with a prolapsed and adherent or incarcerated colon, or a spastic condition of the distal colon. The operation is a simple one and not accompanied with a greater risk than an appendectomy. Kellogg says that within the past ten years he has done twenty colectomies selected from

more than 40,000 cases in the Battle Creek Sanitarium. The time has come to call a halt on colectomizing and short circuiting operations. Too much meddling with nature's mechanisms is dangerous. The Roentgen ray has shown that prolapse of the stomach and colon are not indications for surgical interference; Lane's kink is definitely proved to be a consequence of intestinal stasis and not a cause, and the movable cecum is not a pathologic state.

Personals and News Items.

Dr. W. E. Jones of Paris has moved to Magazine.

Don't let that fly become a grandfather. Kill it now.

Dr. E. D. McKnight of Brinkley has returned from Rochester, Minn.

Dr. G. L. Hardgrove has moved from Clarksville to Hartman.

Dr. M. L. Norwood, Lockesburg, has returned from St. Louis where he has been attending the medical and surgical clinics.

Dr. Geo. B. Fletcher, Little Rock, has given up his practice and has entered the medical service of the U. S. Army.

Dr. Herman Castile of Winchester and Miss Evelyn Hall of Little Rock, were married June 23, 1917, at Arkansas City.

Dr. and Mrs. W. T. Wootton of Hot Springs visited Dr. and Mrs. C. P. Meriwether of Little Rock this month.

Dr. and Mrs. M. B. Owens and their son Martin, of Oneida, visited in Little Rock this month.

The National Committee for Mental Hygiene has created a sub-committee on furnishing hospital units for nervous and mental disorders to the United States Government, the project having been approved by Surgeon General W. C. Gorgas of the U. S. Army.

The City Hospital Board, Little Rock, has recently purchased a block of ground bounded by Eleventh, Twelfth, McAlmont and McGowan Streets in the eastern portion of the city adjoining the City Park, for the new City Hospital, and are now removing the buildings on it preparatory to construction of the hospital.

Dear Doctor: This is your magazine. It represents you, belongs to you, and the man that is handling it is doing it for you. We have told our advertisers that you would give them the preference, all other things being equal. Will you back us up and help this publication prove that it is the best advertising medium through which any business house can reach the leading physicians of the State of Arkansas?

The library of the medical department of the University of Arkansas, Old State House, Little Rock, is short the following Journals of the American Medical Association: Vol. 67—Nos. 13 and 26; Vol. 68—Nos. 13 to 27, inclusive. If any generous doctor who does not keep his Journals wishes to donate some of his set to complete the files, the favor will be greatly appreciated. Address, The Registrar, Second and Sherman Sts., Little Rock.

This sub-committee, of which Dr. Pearce Bailey of New York is chairman, is authorized to secure the services of alienists and neurologists to be commissioned in the Officers' Reserve Corps, Medical Section, and to serve in the neuro-psychiatric units which are to be attached to the base and other hospitals of the military services of the United States. Further information will be given, and application forms sent to physicians qualified in this branch of medicine, on application by letter or in person to The National Committee for Mental Hygiene, 50 Union Square, New York City.

GOING TO WAR.

The following Arkansas physicians have gone or are about to go to the war: J. V. Falisi, W. A. Dashiell, Geo. B. Fletcher, T. M. Fly, W. D. Rose, G. A. McCormack, F. L. Proctor, S. J. Fuller, R. C. Kory, Dewell Gann Jr., S. G. Boyce, R. M. Eubanks, Homer Scott, G. M. Holmes, A. E. Harris, W. A. Snodgrass, A. L. Jobe, S. B. Hinkle, S. P. Bond, E. O. Day, P. V. Wagley, D. C. Lee, Ernest Prothro, R. P. Sheets, R. H. Bryant, Little Rock; Harry C. King, D. W. Goldstein, Fort Smith; J. H. Downs, Vilonia; B. V. Powell, Camden; W. T. Wootton, Loyd Thompson, Hot Springs; G. C. Bruce, Dalark; D. O. Bridgforth, Forrest City; W. H. Brewer, Lincoln Humphreys, Argenta; Fred Bearden, Morrilton; Victor K. Allen and Ellis Weaver, Hope; Burpee Cooper, Eureka Springs; C. B. Austin, Cabot.

HOW TO FORM RED CROSS CHAPTERS

To aid communities throughout the State who wish to organize chapters of the American Red Cross Society so that they can actively enter the work, Dr. Frank Vinsonhaler, State director, Little Rock, Ark., issued instructions which are to be followed in beginning the work. "The public is generally interested in the Red Cross work and wants to organize chapters and enter the work, but it hesitates because it does not know how to begin," Dr. Vinsonhaler said.

The rules given by him are as follows:

"In order to organize a chapter it is necessary to secure 500 names, each one paying $1. In communities in which this can not be done, what is known as an auxiliary chapter can be organized. An auxiliary chapter may consist of any number of members under 500. The difference between a chapter and an auxiliary chapter is that a chapter is permanent, it does not have to be reorganized from year to year; also the chapters are allowed to retain 50 per cent of their membership fees for actual expense, while the auxiliaries are expected to remit all of the membership fees. The advantage of a chapter then is apparent.

"In order to start a chapter or an auxiliary chapter, it is necessary to get up a petition signed by ten persons, each person paying $1. This petition, with a draft of $10, should be mailed to the director of the American Red Cross, Little Rock, after which permission to organize a chapter or an auxiliary chapter will be given.

"As a rule, chapters are limited to the large towns, and usually one to each county. An auxiliary chapter may be organized with ten persons in any community.

"In order that work may begin in a chapter or an auxiliary, it is usually necessary that plans and patterns for the work be in possession of the chapter. These are furnished by headquarters in Little Rock. A very good method of procedure is for some member of the chapter to visit the large working chapter in Little Rock, and in that way become actually familiar with the work. Or, if that is impossible, an organizer can be sent at the expense of the local chapter to instruct them in the actual process of turning out material.

"Red Cross Nurses can only be enlisted from graduates of training schools for nurses. This requires two years, with a certificate of graduation from the training school. All applications of Red Cross nurses for registration should be addressed to Miss Frankie Hutchinson, St. Vincent's Infirmary, Little Rock.

"Red Cross surgeons who desire to enlist should communicate with headquarters in Washington, where they may be directed to some Red Cross unit which is in process of formation."

PLAN TO MOBILIZE DOCTORS IN STATE.

Plans for mobilizing Arkansas physicians for war service were outlined at a meeting July 13 at the Hotel Marion, Little Rock, of the Council of the Arkansas Medical Society, called by President William Breathwit of Pine Bluff. The council voted to begin at once a survey of the state to determine the number of physicians available for army service. This will be done through the county medical societies. Each of the 10 members of the council was instructed to call meetings of the county societies in his district and to instruct them to make surveys and report at once.

The number of physicians in each county eligible for service in the Medical Reserve Corps and the number that will volunteer will be determined at the county meetings. To be eligible the physician must be between 22 and 55, a graduate of a reputable medical school, must have qualified to practice in some state and must be engaged in active practice.

Care for Absentees' Practice.

The matter of taking care of the practice of physicians who enter the army will be taken up at the county meetings. Each county society will decide on the plan to be followed in the county. In some localities physicians who do not enter the army agree to attend to the practice of absentee physicians and turn over to the absentee's family a per cent of fees received from his practice, ranging from 20 to 50 per cent.

The Baxter County Medical Society has notified the council it will send two of its five members to the army, and that the three remaining will take care of the practice of the absentees. The Phillips county society will send three physicians immediately, and probably others later.—Arkansas Gazette.

New and Nonofficial Remedies.

Ampuls Calcium Cacodylate Solution-Mulford.—Each ampule contains calcium cacodylate 0.045 Gm. in 1 Cc. The H. K. Mulford Co., Philadelphia, Pa.

Borcherdt's Malt Extract with Creosote.—100 Cc. contain beechwood creosote, 4 minims per fluid ounce, in Borcherdt's Malt Extract Plain. The Borcherdt Malt Extract Co., Chicago.

Chlorazene Surgical Cream.—It contains chlorazene, 1 Gm., in 100 Gm. of a base composed of sodium stearate, 15 per cent, and water, 85 per cent. The Abbott Laboratories, Chicago.

Borcherdt's Malt Extract with Cod Liver Oil.—A liquid composed of cod liver oil, 20 per cent, and Borcherdt's Malt Extract Plain, 80 per cent. The Borcherdt Malt Extract Co., Chicago.

Betanaphthol Benzoate-Anthony-Hammond Chemical Works, Inc.—A brand of betanaphthol benzoate which complies with the N. N. R. standards for this drug. Anthony-Hammond Chemical Works, Inc., New York City.

Borcherdt's Malt Extract with Cascara Sagrada.—100 Cc. contain cascara sagrada, 60 grains per fluid ounce, in Borcherdt's Malt Extract Plain. The Borcherdt Malt Extract Co., Chicago (Jour. A, M. A., June 23, 1917, p. 1911).

Calcium Cacodylate.—The calcium salt of cacodylic acid containing from 43.5 to 48 per cent of arsenic in the form of cacodylic acid and free from arsenite, arsenate and monomethylarsenate. It has the mild arsenic action of cacodylates. Calcium cacodylate is white, almost odorless, and very soluble in water.

Parresine.—A mixture composed of paraffin, 94 to 96 per cent, gum elemi, 0.20 to 0.25 per cent, Japan wax, 0.40 to 0.50 per cent, asphalt, 0.20 to 0.25 per cent, and eucalyptol, 2 per cent. Parresine acts mechincally. It is used in the treatment of burns, "frostbite," "chilblains" and for covering denuded surfaces. For use parresine is melted and applied while liquid by means of an atomizer or brush. The Abbott Laboratories, Chicago. (Jour. A. M. A., May 12, 1917, p. 1406.)

Kephalin-Armour.—The hemostatic phosphatid obtained from spinal cord and brain tissue of mammals. It is essentially the same as Brain Lipoid, N. N. R. For a discussion of the actions and uses see New and Nonofficial Remedies, 1917, p. 124, under "Fibrin Ferments and Thromboplastic Substances (Kephalin)." Kephalin-Armour is applied freely to bleeding or oozing surfaces in 1 to 2 per cent suspensions in physiological sodium chlorid solution. Armour and Co., Chicago (Jour. A. M. A., June 2, 1917, p. 1625).

Siomine.—Hexamethylenamine tetraiodide, containing 78.5 per cent iodine. Siomine is decomposed in the intestine with formation of hexamethylenamine and iodid. It produces the effects of ordinary iodides, from which it differs only in that, being insoluble in water, it may be administered in solid form. It is marketed in the form of Siomine Capsules containing, respectively, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2 and 5 grains of siomine. Howard Holt Co., Cedar Rapids, Iowa. (Jour. A. M. A., May 12, 1917, p. 1406.)

Lipoiodine-Ciba.—The ethyl ester of iodobrassidic acid containing 41 per cent of iodin. Lipoiodine-Ciba is odorless, tasteless, insoluble in water but very soluble in fatty oils. When administered, it is absorbed almost completely and excreted more slowly than in organic iodids, but more rapidly than with other iodized fats. It is said to be less likely to produce gastric irritation than ordinary iodids. It is supplied only in the form of Tablets Lipoiodine-Ciba, 0.3 Gm. A. Klipstein and Company, New York (Jour. A. M. A., June 30, 1917, p. 1985).

Sofos.—A mixture of sodium dihydrogen phosphate and sodium hydrogen carbonate rendered stable by coating the particles of one of the constituents with disodium hydrogen phosphate. One part of sofos has the same phosphate value as 1.75 parts sodium phosphate U. S. P. When sofos is treated with water, sodium phosphate (Na_2HPO_4) is formed and carbon dioxide is set free. Sofos has the physiologic action of sodium phosphate. It is claimed to have an advantage over the effervescent sodium phosphate preparations in that it is free from citrate or tartrate. The General Chemical Co., New York City. (Jour. A. M. A., May 26, 1917, p. 1551.)

Diarsenol.—A proprietary brand of arsenphenolamine hydrochloride, chemically identical with salvarsan. For a discussion of the action, uses, chemical and physical properties see New and Nonofficial Remedies, 1917, under salvarsan. Diarsenol is marketed in

hermetically sealed ampules containing, respectively 0.1 Gm., 0.2 Gm., 0.3 Gm., 0.4 Gm., 0.5 Gm., 0.6 Gm., 1.0 Gm., 2.0 Gm., and 3.0 Gm. diarsenol. The Council accepted diarsenol for New and Nonoffieial Remedies as the available supply of salvarsan appeared to be insuffieient to supply the demand, and this preparation conforms to the rules of the Council for aceeptanee of proprietary preparations. Diarsenol is made in Canada by the Synthetie Drug Company under a lieense issued by the Commissioner of Patents of Canada. The Farbwerke-Hoechst Company, however, announces that the sale of brands of arsenphenol-amine hydroehloride other than that sold as salvarsan is, in its opinion, an infringement of its rights. The company states that all violations of these rights will be proseeuted under the law. (Jour. A. M. A., May 12, 1917, p. 1407.)

Propaganda for Reform.

SALVARSAN IN TABES WITH OPTIC ATROPHY.—Some assert that salvarsan oeeasionally produees optic atrophy; others with extensive experience believe that it has no injurious effeet on the eye. If given at all, it should be administered early in the disease. (Jour. A. M. A., May 12, 1917, p. 1430.)

K-Y LUBRICATING JELLY.—The composition of this proprietary has not been divulged. Probably a simple tragaeanth jelly will produee the same effeets as this proprietary preparation. At the German Hospital, Philadelphia, a jelly made from tragaeanth, 3 gm., glyeerin, 25 e. e., phenol, 1.5 gm., with water to make 300 e. e., has been used for years. (Jour. A. M. A., May 12, 1917, p. 1430.)

MORE MISBRANDED NOSTRUMS.—The following "patent" medieines have been found to be marketed in contravention of the requirements of the U. S. Food and Drugs Aet, chiefly beeause the medical elaims were found untrue: Whitehall's Megrimine, eapsules containing aeetanilid, caffeine and salol (in one instanee also eapsules eontaining antipyrine and eapsieum).—Brown's Blood Treatment, a liquid containing mereury and iodid.—Classe's Great Penetrating Liniment, an alcoholie solution of ammonia, ehloroform, opium, eamphor, oil of sassafras, oil of origanum and a thujone-eontaining oil.—Brown's "935" Injeetion (Formerly H. W.), a dilute solution of aeetate and sulphate of zine. (Jour A. M. A., May 12, 1917, p. 1427-8.)

BROM-I-PHOS.—The Counеil on Pharmacy and Chemistry reports that Brom-I-Phos (the National Drug Co.) is not eligible for admission to New and Nonoffieial Remedies. The label deelared the preparation to eontain iodin, bromin and phosphorus in an aromatie base. The A. M. A. Chemical Laboratory found that Brom-I-Phos eontained no free iodin, no free bromin and no elementary phosphorus; instead it appeared to be an alcoholie preparation eontaining iodid, bromid and a little phosphate. The Counеil rejeeted Brom-I-Phos beeause the statement of composition was unsatisfaetory and misleading; because the therapeutie elaims were exaggerated, and beeause the eombination of bromin, iodin and phosphorus, or of bromid, iodid and phosphate is irrational (Jour. A. M. A., June 30, 1917, p. 2001).

WHEELER'S TISSUE PHOSPHATES.—This is advertised as a "nerve food" and a "nutritive tonie." L. E. Warren of the A. M. A. Chemieal Laboratory has analyzed this semi-seeret proprietary and reports that it is a mildly bitter, flavored syrup whieh eontains nearly 12 per eent of aleohol, small quantities eaeh of calcium phosphate and hydroehlorie aeid and insignificant quantities of iron and quinin salts. From the analysis it is evident that Wheeler's Tissue Phosphate is an unseientifie, shotgun mixture whose most aetive and powerful eonstituent is the aleohol whieh it eontains. (Jour. A. M. A., May 5, 1917, p. 1337.)

FROSTILLA.—The lotion for ehapped hands is, aeeording to the Druggists Cireular, a quince seed mueilage containing aleohol, glycerin and perfume. (Jour. A. M. A., May 5, 1917, p. 1341.)

THE CALCIUM CONTENT OF THE BLOOD.—It has been found that the ealeium eontent of the blood plasma of eattle is remarkably eonstant, even when there is a eontinuous withdrawal as a result of pregnaney or laetation. It has also been found that there is no marked deviation from the normal in the ealeium eontent of the blood serum of patients in the various stages of pulmonary tubereulosis. Even when a high milk diet was furnished over long periods, the ealeium eontent of the blood was not inereased above normal. Further, it was shown that the ealeium eontent of the blood serum of normal human adults did not differ from that in sufferers from tubereulosis. Finally, it has been found that the ealeium eontent of blood plasma differs little from the normal in advaneed eases

of uremia or in hemophilia or in purpura hemorhagica (Jour. A. M. A., June 23, 1917).

More Misbranded Nostrums.—The following "patent medicines" have been found misbranded under the U. S. Food and Drugs Act, chiefly because the curative claims made for them were unwarranted and untrue: Sterline's Asthma and Hay Fever Remedy is a water-alcohol solution containing potassium and sodium iodids, bromids and acetates, as well as some laxative substance.—Sterline's Bronchial Elixir, a solution of morphin, potassium citrate and aromatics in alcohol and water.—Lung-Vita, consisted essentially of a petroleum oil, saponifiable oil and a solution containing sugar and glycerin, with a small quantity of benzoic acid.—Arch Brand Nerve Tonic, a compound hypophosphite syrup.—Arch Brand Blood Remedy, containing 18 per cent alcohol, sugar, potassium iodid, sarsaparilla and emodin-bearing drugs (Jour. A. M. A., June 23, 1917, p. 1932).

Biologic Therapy in the War.—According to G. W. McCoy, Director Hygienic Laboratory, U. S. Public Health Service, there are five biologic products—vaccine virus, diphtheria antitoxin, tetanus antitoxin, antimeningococcus serum, and antityphoid vaccine—which may be regarded as indispensable in connection with conditions which prevail when large bodies of men are brought together. The firms manufacturing these products can, if need be, meet the demands of our own army and civilian population as well as those of our allies. McCoy believes that with the good sanitary conditions that may be expected to prevail in our concentration camps, the need for vaccine agents not thoroughly tried out, such as antidysentery serum, antipneumococcus serum, and vaccines against dysentery, cholera and epidemic meningitis, should not be extensive with the possible exception of the meningococcus vaccine. (Jour. A. M. A., May 12, 1917, p. 1413.)

Preparations of the Pituitary Gland.—The last edition of the Pharmacopeia, recognizing that the best attested field of usefulness for pituitary extracts is in obstetrics, adopted the test of their activity on the uterus of the guinea-pig according to the method of G. B. Roth, of the U. S. Hygienic Laboratory. Roth now reports on the activity of seven commercial samples, the products of five American firms. Four of the samples were found of Pharmacopeia strength; the other three were much weaker. Those preparations which have been accepted by the Council on Pharmacy and Chemistry for New and Nonofficial Remedies corresponded to the pharmacopeial requirements. Roth's work shows that the blood pressure method for determining the activity of pituitary preparations is not a satisfactory method for determining the activity of a preparation on the uterus. (Jour. A. M. A., May 5, 1917, p. 1325.)

Examination of Ambrine and Various Paraffins.—P. N. Leech of the A. M. A. Chemical Laboratory reports on the composition and properties of Ambrine and the various preparations proposed for the treatment of burns. He finds that the French proprietary Ambrine—exploited in the United States as Hyperthermine and Thermozine—is essentially paraffin in which a small amount of a fatty oil and asphalt is incorporated. A preparation similar in composition but superior to Ambrine in physical properties may be made by dissolving 3 to 5 drops asphalt varnish in 1.5 Cc. of olive oil and adding this to 97.5 Gm. melted paraffin, melting at 47.2 C. It is probable that for most purposes simple paraffin will answer just as well as Ambrine or the mixtures proposed in its place. Whether used alone or in mixtures, the physical properties of the paraffin are most important. Paraffin U. S. P. will not answer, and hence the properties of many commercial brands of paraffin were determined and the best products are designated. (Jour. A. M. A., May 19, 1917, p. 1497.)

Russell Emulsion and Russell Prepared Green Bone.—The Council on Pharmacy and Chemistry reports that "The Russell Emulsion" and "The Russell Prepared Green Bone," put out by the Standard Emulsion Company, are inadmissible to New and Nonofficial Remedies. The Russell Emulsion is said to be composed of beef-fat, coconut, peanut and cottonseed oils, held in suspension by albumin. The mixture is called a "physiological" emulsion and is exploited on the theory that lime starvation is a main factor in tuberculosis and that large amounts of fat are required for the lime starved. There is no proof that tuberculosis is due to an insufficiency of lime in the tissues, and the claims made for the emulsion are grossly unwarranted. Particular attention is called to the exploitation of the emulsion by one Dr. Hague who talks before medical societies. The Russell Prepared Green Bone is said to

be made by digesting chicken bones with hydrochloric acid and pepsin and adding glycerin at the end of the digestion. This is advertised as a lime food. The greater value of a few glasses of milk daily is not mentioned (Jour. A. M. A., June 23, 1917, p. 1931).

Dating of Biologic Products.—William H. Park, Director, Bureau of Laboratories, Department of Health, City of New York, endorses the recently adopted requirements of the Council on Pharmacy and Chemistry that biologic products to be acceptable for New and Nonofficial Remedies must bear a statement of their date of manufacture. He believes that these requirements might well be made more specific and stringent. The rules of the New York Health Department governing the distribution of biologic products are: 1. The label on all bacterial vaccines must state the date the suspensions are made, standardized and killed. 2. The label on all serums other than antitoxin shall state the date of bleeding. 3. The label on antitoxins shall give the date when the preparation was last tested. 4. The label on vaccine virus shall have the date when the virus was last tested. Dr. Park states that there is no intention of extending the potency date of bacterial vaccines (four months) or of serums (nine months) other than the antitoxins until there are very specific data on which to act. For vaccine virus 100 per cent of "takes" is demanded. (Jour. A. M. A., May 12, 1917, p. 1428.)

Nutrolactis and Goat's Rue.—Drugs which stimulate the secretion of milk are unknown to science. Yet the proprietary Nutrolactis (The Nutrolactis Company) is claimed to increase the milk supply of nursing mothers. Since dependence on a preparation of this kind is liable to cause neglect of the only means of increasing the milk supply of nursing mothers—care of the general health and a sufficient quantity of proper food—Professor A. J. Carlson and Marion Lewis of the Hull Physiologic Laboratory of the University of Chicago studied this proprietary and the drug goat's rue (*Galega officinalis*), which the proprietors of Nutrolactis hint as being the potent constituent to determine their effects on nursing animals with the intention of extending the study to nursing mothers if the animal trials warranted this. The animal experiments showed that neither Nutrolactis nor goat's rue had any effect on the milk of nursing goats or dogs. The Council on Pharmacy and Chemistry, which had caused the study to be made, endorsed the work of Carlson and Lewis, and held that the claimed galactagogue effects of Nutrolactis and the drug goat's rue had not been substantiated. (Jour. A. M. A., May 26, 1917, p. 1570.)

Some Misbranded Cough Remedies.—The following "cough remedies" have been declared misbranded under the U. S. Food and Drugs Act, chiefly because the curative claims made for them were found to be false and fraudulent: Barker's Remedy for Catarrh, Coughs, Colds and Rheumatism is essentially sugar and water with a small amount of cubebs, potassium iodid and creosote.—Mathieu's Cough Syrup, formerly called Syrup of Tar and Cod-liver Oil, containing little, if any, tar and no cod-liver oil, but containing alcohol, chloroform, creosote and menthol.—Forrest's Juniper Tar, containing alcohol, petroleum and oil of tar.—Terraline Plain, found to be simply liquid petrolatum.—Terraline with Heroin, found to be liquid petrolatum with heroin.—Classe's Cough Syrup, a syrup containing alcohol, glycerin, tolu and wild cherry, and having an odor of tar.—Essence Menthol-Laxene, containing alcohol, menthol, ammonium salts, chlorid, sugar, drug extract and an unidentified alkaloid.—Brown's Acacian Balsam, containing alcohol, acacia, nitrate, licorice, meconic acid, tartrates, reducing sugar, sodium and potassium compounds.—Sykes' Sure Cure for Catarrh, containing potassium chlorate, ammonium chlorid and small amounts of alcohol, hydrastin and methyl salicylate.—Warner's White Wine of Tar Syrup, containing opium and alcohol, no tar and but an insignificant amount of wine.—Rawleigh's Golden Cough Syrup, containing alcohol, chloroform, menthol, guaiacol and perhaps horehound.—Rawleigh's Ru-Mex-Ol, containing 26½ per cent alcohol and vegetable matter in which rhubarb was indicated.—Gooch's Mexican Syrup of Wild Cherry, Tar, etc., containing morphin and alcohol, sugar, glycerin, methyl salicylate and benzaldehyde as flavor, and small amounts of tar and cherry (Jour. A. M. A., June 16, 1917, p. 1863).

Flavored Epsom Salt.—When a physician prescribes a dose of Epsom Salt to be taken in one of the official aromatic waters, he does not create a new invention. Yet the U. S. Patent Office has granted a patent for the

"discovery" of a method for flavoring Epsom Salt (Jour. A. M. A., June 23, 1917, p. 1914).

County Societies.

JEFFERSON COUNTY.

(Reported by Frank Lieberman, See'y.)

The regular meeting of the Jefferson County Medical Society was called to order June 5, 1917. Dr. Lemons acted as chairman, both the President and Vice President being out of the city. Members present: Drs. Breathwit, Crump, Jenkins, Johns, Jordan, Lieberman, Lemons, Lowe, Luck and Pittman.

Under the head of Clinical Cases, Dr. Lowe reported the history of a negro woman 55 years old with a well established case of pellagra, it being the third summer she had been troubled with it. He put her on a very liberal protein diet consisting almost entirely of milk, meat, peas, beans and eggs. By mouth he gave her reduced iron and quinine and ten doses of neo-salvarsan intravenously. She began to improve at once and at the present time she is clinically and symptomatically well; but he advised her to keep up with the protein diet.

Dr. Luck reported three cases of enlarged bladder that he had recently seen at operation when they had voluntarily voided just before being sent to the operating room. One of these cases was so large that it resembled an ovarian cyst.

Dr. Jenkins, the essayist, read a very interesting paper reporting several clinical cases. Two of these cases were craniotomies, one a gastro-enterostomy for Carcinoma of the stomach, causing obstruction at the pyloric end. Another case was that of a white male with an acute perforated appendix with general peritonitis; laparotomy with free drainage was all that was attempted. Another case was that of a negro male with an un-united fracture of the lower third of the tibia. A bone graft was done with perfect results. All of these cases made uninterrupted recoveries and at present are in perfect health except the patient with the Carcinoma of the stomach, who died about three months after the operation.

The paper was ably discussed by all members present, after which, no further business appearing, the meeting adjourned at 9:30 p. m.

JEFFERSON COUNTY.

(Reported by Frank Lieberman, See'y.)

The Jefferson County Medical Society met in regular session in the office of Drs. Breathwit, Jenkins and Withers on the night of July 3rd. Members present: Drs. Breathwit, Crump, John, Lemons, Lieberman, Palmer and Shelton.

The minutes of the previous meeting were read and approved without correction.

Dr. John, the essayist, reported several interesting obstetrical cases. They were principally hand presentations where he had done a podalic and given antistreptococcic serum as a prophylactic with good results. Two of these cases were still-births and the mother said that she had not felt life for a month. Dr. John also discussed the value of pituitrin, asserting that he had reached the conclusion that he got along as well if not better without it.

Drs. Shelton, Crump, Lemons and Palmer joined in the discussion.

A letter was read from the Pulaski County Medical Society stating that Dr. O. C. Hankinson was a member in good standing and that he had asked that his membership be transfered to this county. The secretary was requested to write both Dr. Hankinson and the Pulaski County Medical Society that the demit had been accepted.

The Society adjourned at 9:30.

Book Reviews.

PRACTICAL URINALYSIS.—By B. G. R. Williams, M. D., Director Wabash Valley Research Laboratory. Author of "Laboratory Methods," etc. Illustrated. Published by C. V. Mosby Company, St. Louis, Mo., 1916. Price, $1.25.

This small volume is offered as a guide in diagnostic matters likely to be met with by the busy physician from day to day. The author describes general, chemical, quantitative, microscopic and bacteriological urinalyses.

THE NEWER METHODS OF BLOOD AND URINE CHEMISTRY.—By R. B. H. Gradwohl, M. D., Director of the Pasteur Institute of St. Louis and the Gradwohl Biological Laboratories, St. Louis; and A. J. Blaivas, assistant in the same. Sixty-five illustrations and four color plates. Published by C. V. Mosby Company, St. Louis. Price, $2.50.

This volume fills the demand from those keenly interested in blood and urine chemistry. The book is divided into three sections. Part I. describes the technic of Blood Chemis-

try; Part II. Chemical Analysis of Urine and Part III. gives Blood Findings and Their Interpretation.

Clinical and Laboratory Technic.—By H. L. McNeil, A. B., M. D., Adjunct Professor of Medicine and Instructor in Physical Diagnosis, University of Texas Medical School, Galveston, Texas. Illustrated. Published by C. V. Mosby Company, St. Louis, Mo., 1916. Price, $1.00.

This small book gives the author's experience as a teacher of medicine and of physical diagnosis at the bedside, and at the same time of clinical pathology in the laboratory. It should prove of great value to the physician who does some of the common laboratory tests himself or one who desires to familiarize himself with the common tests which are being used.

Handbook of Suggestive Therapeutics Applied Hypnotism Psychic Science.—A manual of practical psychotherapy, designed especially for the practitioner of medicine, surgery and dentistry.—By Henry S. Munro, M. D., Omaha, Nebraska. Fourth Edition, Enlarged and Revised. Published by C. V. Mosby Company, St. Louis, 1917. Price, $5.00.

This volume gives the practical and scientific side of psychotherapy. The author emphasizes the value of suggestive therapeutics. Two new chapters have been added—one on Suggestion in Dentistry and the other is a philosophical dissertation on the Human Libido. The author has named this chapter, "The Tie that Binds and the Urge that Drives."

Diagnosis from Ocular Symptoms.—By Matthias Lanckton Foster, M. D., F. A. C. S. Member of the American Ophthalmological Society; Ophthalmic Surgeon to the New Rochelle Hospital; First Lieutenant in the Medical Reserve Corps, United States Army. Published by Rebman Company, New York, 1917. Price, $6.00.

The author of this volume presents an analysis of the symptoms that appertain to or appear in the eye and shows how those which resemble each other differ, and how exclusion is to be made. The symptomatology of diseases of other parts of the organism is elaborated only insofar as seems necessary for the understanding of the associated ocular symptoms.

WHOLESOMENESS AND ECONOMY.

The Nation is at war. To protect our rights we must have an efficient fighting machine. The men must be given wholesome and nutritious food in sufficient quantity. The stupendous character of the conflict necessitates rigid economy of both men and material. Nothing is economy that renders food less wholesome but there is no excuse for catering to prejudices at an increased cost. We shall need all our dollars before the war is over. We must secure for our soldiers the most wholesome food at the lowest price.

Our governmental departments are subject to criticism by the whole country and it would not be surprising if they catered to known prejudices in order to avoid annoying criticism. But in time of war we must be governed by scientific facts and not by prejudice. Big interests, whose advantage lies in the support of a prejudice, may criticise, but our leaders must be big enough to practice economy in spite of such unjust criticism. That economy will be practiced and that scientific facts and not prejudice will guide the government in the selection of wholesome foods is clearly indicated by recent actions by the Department of the Interior, the Army and the Navy. All these departments have recognized the findings of the Referee Board of Scientific Experts who found that alum baking powders were as healthful as any other baking powders. These departments have recently purchased large quantities of alum phosphate baking powders. This is the type which was furnished our soldiers on the Mexican border and subsequently to our sailors, and which proved so satisfactory. The people of the United States have recognized the wholesomeness and economy of this type of baking powder for years. Eight per cent of the baking powder used in the United States contains alum. Its wholesomeness is unquestioned. Its economy is marked. Not only are alum powders generally much stronger, so strong that the manufacturers recommend the use of only half the quantity called for by high priced baking powders, but the price of the powder pound for pound is but half as much. This means that the use of one pound of phosphate alum powder at 25c does the work of two pounds of the other powders costing one dollar. The saving is 75c. War prices would have no terrors if we could make an equal saving on all our foods by substituting something equally wholesome, twice as effective and at half the price.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., AUGUST, 1917. No. 3.

Original Articles.

DEDUCTIONS FROM THREE HUNDRED SURGICAL CASES.*

BY MAHLON D. OGDEN, M. D., F. A. C. S.
Little Rock.

During the course of visiting the various clinics about the country, I have been impressed with the amount of information and benefit I have gained through informal discussions of some of the minor features of each subject not usually mentioned in the medical literature and one of the reasons for our visiting the different clinics is to compare the work and personal opinions of the various medical men. We profit by their experiences and mistakes (when they are frank enough to confess them) and I present this paper to you as an informal and rather sketchy representation of my ideas and opinions based upon the study of my last three hundred cases. I have taken the last three hundred because their records are more complete than the former ones.

You will observe that I touch upon only a few features of each subject, those features which have impressed me. You will observe also that at times I am quite dogmatic, but this is for the sake of brevity and implies no criticism of those who hold different opinions.

This paper therefore presents my deductions from my experience and I offer it for what it may be worth.

McDONALD'S SOLUTION.

This is composed of Pyxol 2 parts, acetone 40 parts and denatured alcohol 60 parts. It is used for sterilizing the skin of both surgeon and patient. It is less irritating than iodine and more effective. I have used it in fifty cases of all kinds and in not a single instance was there an infection in a previously clean case.

In one case of gunshot wound of the abdomen with profuse hemorrhage, to gain speed I sterilized my hands, gloves, instruments and patient's abdomen with McDonald's Solution, resected two sections of perforated bowel, mopped out the abdomen with the solution and obtained an uneventful recovery with healing by first intention. I consider it a distinct advance in surgical technique.

PELVIC INFLAMMATORY DISEASE.

Some of the causes of this condition are well known such as gonorrhea and puerperal infection, but much has not been written about the role of an infected cervical laceration. Elsewhere in this paper, I mention the necessity of removing the primary focus of infection as well as treating the results of it in the tubes and ovaries. In acute cases any abdominal operation is contraindicated until the temperature has remained below 100-F for one week and the white blood count is less than 20,000.

Pregnancy is not a contraindication. I have operated in all the months of pregnancy without causing miscarriage or premature labor, in one case even removing an ovary containing the corpus luteum of pregnancy and delivering the patient six months later of a normal child. My most frequent error in pregnancy has been in mistaking an inflammatory process for ectopic gestation.

Of course when the abscesses are low enough it is advisable in some acute cases to drain through the cul-de-sac; but when the process is very acute I hesitate to do even this as my mortality with such cases has been very high, in fact, much higher than with the chronic cases by the abdominal route. The non-operative acute cases I treat by proctoclysis, morphia gr. 1-4 every 4 hours hypodermatically, ice bag to abdomen and absolutely nothing by mouth, not even water.

As to technique, adherent pus tubes and ovaries should be dissected from below upwards as the line of cleavage is more readily

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

found, and the danger of rupturing a pus tube is less. The appendix is always removed if pus has not been spilled and the condition of the patient permits. Cigarette drains are left if pus has been spilled or there is much oozing of blood. Rubber tubes are liable to cause fecal fistulae. Drains are removed on the fifth day if there is not much drainage.

Pus tubes are often adherent to the sigmoid and must be freed with great care and the denuded surface of the bowel whipped over and even then fecal fistulae are not uncommon occurrences. These, however, usually close without any further procedure.

I must confess to an indecision at present as to what should be done with the cystic ovaries in such cases. One dislikes to remove both ovaries of young women on account of the ensuing nervous symptoms and sterility and on the other hand the puncture of the cysts or the resection of part of an ovary in a very large per cent of cases is followed by most distressing ovarian symptoms necessitating the later removal of the ovary. The resection of a part of each ovary is a very pretty operation unless one has to live in the same vicinity with the patient a few years afterwards. I transplanted the ovaries in one case to the subcutaneous tissue of the abdominal wall with apparently good results so far but my series of transplantation is not large enough or old enough from which to draw any permanent conclusions. The foregoing is the reason for my indecision in this matter, and perhaps the discussion may throw some light upon the subject.

Ovarian Cyst.

There is not much to add to what is already known about ovarian cysts except to insist that whenever possible they should be removed, unruptured and a trocar should not be used when it is possible to avoid it, for every once in a while one opens into a papillomatous cyst which if spilled in the abdomen will result in widespread metastases all over that cavity and ultimately in death from malignancy.

By an ovarian cyst I refer to the large sacs and not to the smaller cystic ovaries found in connection with pelvic inflammatory disease.

In this connection I might mention the close resemblance between the symptoms of appendicitis and small ovarian cyst with a twisted pedicle, and also between pregnancy and the large cysts. I have on three occasions found an advanced pregnancy when I opened the abdomen for ovarian cyst.

Imperforate Hymen.

All authors writing on hematocolopos and hematometra caused by imperforate hymen speak of the great danger of infection resulting from incision of the hymen. In every case I have had up to this year I have had more or less infection, but no deaths.

In a case which presented in January, 1917, I resolved to see if there was not some way to avoid this infection and to this end I saw to it that the technique was as rigid as in abdominal or bone work. I excised (not incised) the hymen releasing about a quart of tarry blood and mucus. I then introduced a tube to the fundus of the uterus and irrigated with several gallons of sterile five per cent solution of bicarbonate of soda (to dissolve the mucus and remove the blood) until the solution came back perfectly clear. I then lightly packed the vaginal orifice with iodoform gauze to prevent the possible entrance of infection later on.

The recovery was without incident and at no time was there a rise in temperature.

Cancer.

I have nothing new to offer in a curative way for inoperable cancer. The Percy operation, the Burns operation, the X-ray, radium, the use of acetone after Gellhorn or Fuller's earth all contribute to the comfort of the patient, relieving the pain and offensive odor and prolonging life; but I have yet to see an inoperable cancer of the breast or uterus cured by any method. Such cases have been reported, but it has not been my good fortune to see them.

It may seem trite to repeat what you have heard in this Society year after year, but I have reason to believe that there is still room for missionary work. The only cure for cancer at present is an early radical operation with emphasis on both early and radical. The early operation depends upon an early diagnosis and the radical operation depends upon the surgeon. In view of the present day general knowledge of cancer and the ready accessibility of medical literature, I believe that it is criminal for a surgeon to attack a cancer of the breast by an operation other than a Halstead, Rodman or similar radical procedure or a cancer of the uterus by any other than a Wertheim Operation. It is true that some early adenocarcinomata of the fundus are sometimes cured by simple hysterectomy;

but it is more often accident than design and should not constitute a precedent. Many more are lost than are cured.

Vaginal Hysterectomy.

To my mind there is only one indication for vaginal hysterectomy and that is in certain cases of prolapsus uteri.

In some cases of complete procidentia, where the uterus is either too large or too small to interpose beneath the bladder for the relief of a cystocele, it is best to remove the uterus by a vaginal hysterectomy and draw the broad ligaments down beneath the urethra for the support of the bladder; but to remove a uterus in this manner for the relief of a suspected or known malignancy is worse than useless,, as it is not possible to do a radical operation by this route which does not permit the necessary inspection afforded by the abdominal incision. It subjects the patient to a useless operation and definitely shortens her life.

Submucous Myomata.

These tumors, as you are well aware, sometimes become pedunculated and necrotic and when quite large with a very foul discharge may be confused with an inoperable cancer of the cervix. The differential diagnosis is made in case of sloughing fibroid by the presence of the dilated cervical ring extending uniformally around the sloughing mass in the vagina and occasionally the pedicle is palpable. The history is also of great assistance. The safest method to remove these tumors is by the cautery which reduces hemorrhage and infection.

I wish to call attention to a valuable operation in cases of bleeding submucous fibroids where for some reason it is undesirable to sacrifice the uterus. I refer to vaginal myotomy, where an incision is made into the utero-vesical pouch, the fundus drawn into the vagina and the uterus split on its anterior surface. The interior of the uterus is thus completely bared to inspection and any necessary work done. It has been of great value to me in many instances where vaginal or abdominal hysterectomy was out of the question.

Curettage.

There is much to be said against this operation and comparatively little in its favor. It is a procedure that has been abused for many years and is often done without any rational basis.

Curettage is indicated for retained secundines and in some cases of chronic endometritis especially those with a polypoid tendency and also for diagnostic purposes; but is contraindicated in any inflammatory disease of the adnexa either acute or chronic. I have on more than one occasion seen a curettage light up an old chronic pelvic inflammatory process and start a fatal peritonitis. There is also no logical reason why one should curette for sterility as it is the accompanying dilatation which produces the benefit when such is obtained.

At this point I might mention the beneficial results in five cases of so-called idiopathic hemorrhage of the menopause when a curettage had shown the absence of any malignancy and had failed to check the bleeding, of the use of undiluted formalin in the interior of the uterus. This remedy has been uniformly successful but is very painful for an hour or so.

Cervix and Perineum.

An infection in a lacerated cervix extending along the lymphatics of the uterus gives rise to many cases of disease of the adnexa with its characteristic symptoms. For this reason it is possible, by the removal of the primary focus of infection in the cervix, to benefit many of these cases without an abdominal operation. In fact, in many such cases, an abdominal operation with removal of tubes and ovaries, leaving the uterus or stump of cervix is unsuccessful until the infected cervix is also removed later on.

An essential part of the succesful repair of a cervical laceration is the pre-operative treatment. I use boroglyceride tampons for a week before the operation in badly infected cases.

I also use chromic catgut as a suture as it is not desirable to dilate a recently repaired perineum to remove a non-absorbable suture ten or fourteen days later. For the perineum I use a flap splitting operation, drawing the levator ani muscles and fascia together in the mid-line with chromic catgut, using plain catgut for the more superficial sutures.

Of the twelve cases of the Watkins-Wertheim operations of interposing the uterus between the bladder and vagina for the cure of cystocele, I have had two bad results. One was a recurrence of the condition due to the use of a uterus much too heavy and the other was one or two weeks pregnant at the time

of operation and I did not recognize it. The ultimate results in this case, however, were good.

Uterine Retroversion.

It is my belief that retroversion has been given far too much consideration as a factor in the production of gyneecological symptoms. It can produce a dysmenorrhea, especially when associated with varicocele of the broad ligaments but, uncomplicated by adhesions or a perineal tear, rarely causes a backache and never constipation. It is difficult to conceive how a freely movable organ lying against the rectum could be an impediment to the movement of its contents. A retroverted uterus is one of the causes of sterility.

In cases not suitable for operation much relief can be obtained by the use of pessaries, of which I prefer the Thomas or Hodge.

Of the many operations devised I use Simpson's modification of the Gilliam, employing his special forceps which have the proper curve for passing through the internal ring. This operation does away with the only objection to the Gilliam operation by not leaving any bands stretched across the pelvis as a possible cause of future intestinal obtruction. It also retains all of the advantages of the original Gilliam operation.

Anteflexion.

In a case of dysmenorrhoea with no other findings on examination but an anteflexion, when the pain is premenstrual in type and relieved at the onset of the flow, most gratifying results are obtained by the use of a Chambers dilator. This is inserted into the cervix after dilatation under an anaesthetic (usually gas) and worn for three to six months, being inspected after each menstrual period to ascertain if the contractions of the uterus have forced it down into the vagina.

This dilator has usually been sufficient and there were only a few cases where I had to split the posterior lip of the cervix (Dudley's operation).

Caesarian Section.

At this time my attitude toward the indications for this operation is not settled, but in a hospital I am of the belief that Caesarian section is less of a major procedure than high forceps and by high forceps I mean when the head is not engaged at the brim of the pelvis.

An hystereetomy should always be done where there have been previous attempts at delivery.

Just at this point I wish to say a word in favor of the much neglected practice of pelvimetry. I measure every primipara at the eighth month and have more than once seen its justification. The more operative obstetries I do the more I am convinced that it is inexcusable for an obstetrician to discover a contracted pelvis at labor and in such cases pelvimetry just means the difference between saving life and losing it and if it is lost the death must be laid at the door of the obstetrician.

Mobile Cecum.

I presented a paper upon this subject to this society two years ago and since that time I have had many more cases which have further convinced me that mobile cecum is a distinct clinical entity and can be relieved. I will not again go into details but merely state that of my last fifteen cases, only three were not relieved of their symptoms and I think now that in these three cases the ascending colon should have been removed as there was an extensive pericolitis.

I anchor the cecum to the posterior abdominal wall by two or three linen sutures.

Cholecystitis.

In this condition I am leaning more and more toward removal of the gall bladder as the operation of choice in most cases.

I have drained more than one gall bladder that should have been removed; for later on there was a recurrence of symptoms, and it is a bit embarrassing to have to tell the patient that he needs another gall bladder operation.

As to technique a good exposure is essential for work around the cystic or common ducts and in removal of the gall bladder it is safest to ligate the cystic duct and cystic artery separately as the chances of hemorrhage or leakage are much less.

Hernia.

For umbilical hernia the Mayo operation has been entirely satisfactory as has been a similar proeedure for ventral hernia.

For inguinal hernia I use the Ferguson operation without transplanting the cord, using number three twenty-day chromic catgut as a suture. The youngest patient was three months of age with a strangulated sliding hernia, the sac containing the cecum and appendix. The oldest patient was seventy-eight years of age and the operation was done with local anaesthesia.

For double inguinal hernia I use the Judd method, reaching both sacs through one incision. This is a very easy method.

Hemorrhoids.

For hemorrhoids I have for many years been using the clamp and cautery, having seen nothing to change my opinion that it is the most effectual of these operations and undoubtedly the least painful afterwards.

If one is careful to avoid the inclusion of the mucocutaneous junction in the clamp, there is no pain until the bowels move on the fifth day after operation.

Rectal Fistula.

The classical incision is preferred for this condition, packing with gauze and avoiding the use of sutures. It having been my earlier experience that it is most rare for the area to heal after excision and suture.

I am also very particular now to explain beforehand to each patient that the operation may result in partial or complete incontinence necessitating a secondary operation. This has been impressed upon me by reason of a suit for $25,000 against me on account of a sphincter which failed to unite after incision.

Non-malignant Rectal Stricture.

I have been impressed with the beneficial results of a temporary colostomy in some cases of high stricture which have much ulceration and are not adapted to incision.

This colostomy is a temporary inconvenience but is easily closed.

Prostatectomy.

I use the suprapubic route and enucleate with the right forefinger, steadying the prostate with the left gloved forefinger in the rectum. This operation is always preceded by a cystoscopic examination of the bladder and if there is much cystitis I do preliminary cystotomy and drain the bladder for several days before removing the prostate.

I have lost one case from general peritonitis through tearing the peritoneum at the space of Retzius during the secondary operation.

Laminectomy.

With this operation my results have been poor, my greatest difficulty in cases of spinal fracture being to determine whether or not the cord has been severed, in which event the operation is contraindicated.

In one case of intractable posterior root pain due to spinal lues I severed the antero-lateral columns of the cord on both sides. This column is easily located and is supposed to carry only the sense of pain and temperature. The patient, however, developed a paralysis of both sphincters and died in a few weeks.

Ununited Fractures.

In these cases I have definitely abandoned the Lane plates and have become a firm convert to the bone graft either inlay or medullary according to the case. I have had one case where the graft "took" in the presence of quite a severe infection.

I cannot urge too strongly in all bone work the rigid adherence to the Lane technique, permitting nothing that has come into contact with the hands to go into the wound; handling all sponges, sutures, etc., entirely with forceps.

Pott's Disease of the Spine.

I have a case of spinal tuberculosis operated upon six months ago which to date is a perfect result. Union was by first intention straight through, and the patient, male, age fifty-eight, is entirely relieved of his terriffic posterior root pains.

DISCUSSION.

Dr. C. S. Pettus, Little Rock.—I find a great deal of interest in the surgical information that Dr. Ogden has brought us. I feel that the scope of his paper is so broad that I can deal with but one phase of his paper, and that is resection of the ovary. I got in just about the time he reached that part of his paper.

I do not understand exactly what he said unless he advises against the removal of any part of the ovary only when it is absolutely necessary, and then remove the entire ovary. This he advises because of his results in resecting ovaries which he says have been unfavorable.

I never remove the entire ovary if there is any part of the tissue that can be left. My own experience in removing ovarian cysts and other pathological conditions that involve the ovary, and leaving behind healthy ovarian tissue, has been very satisfactory.

My method is to remove the tube on the side that I remove part of the ovary. I always do that and the removal of the tube I consider the secret of my success in handling the remaining portion of the ovary.

I remove the tube, starting from the cornua of the uterus, catching the fold of the broad ligament until I get to the fimbriated extremity; then I pucker up the ovary after denuding that surface that comes in contact with the uterus, having also denuded the surface of the uterus, and sew the denuded portion of the ovary to the denuded surface of the uterus.

The manner in which the broad ligament folds itself gives further assistance in relieving the ovary from prolapsus in the future.

As I say, my results have been very satisfactory, and I have employed this method something like fifty times. Just how well the ovary stays up I am unable to say, as I have never had occasion to go into an abdomen after having done this operation.

The doctor's statement along this line is very interesting to me and for that reason I merely wished to discuss this one phase.

Dr. E. L. Beck, Texarkana: It was my pleasure to have Dr. Ogden associated with me in some surgical work, and I was much pleased with same. I shall not attempt to discuss his paper, except to refer to possibly one item, namely, that of Cesarean section, and the use of forceps in high deliveries, and in this, I think the Doctor is eminently correct. I do not think that a man is justified in using forceps in high deliveries where conditions permit him to do a Cesarean section. With the present cleanly hospitals and perfected technique, there is no good reason why a Cesarean section should not be done with reasonable safety in such cases.

I do not recall whether he did or did not include placenta previa in this connection, but if he did not, I would suggest that he add it, for I believe that all cases of central implantation of placenta previa should be handled in a like manner.

Referring to the question of whether you should leave a part of the ovary or take it all. If you take them out completely, you may have nerve storms, and they may give you 'fits'' as a result of same. If you leave a part of them, the chances are you will have to go back for a second operation. So they will give you ''fits'' either way it goes. You had about as well throw ''heads and tails,'' or exercise your judgment in the individual case and take what follows.

Dr. Thos. Douglas, Ozark: The paper is very interesting and profitable, I believe the speaker failed to remind us, as gynecologists usually do, that a considerable number of these cases are due to our poor obstetrical work. Speaking of the neglected practice of pelvimetry, I believe that is a subject of considerable importance. I wonder how many of those present have been practicing it. A year or two ago I got a pelvimeter, and have since been making it a practice, as Dr. Ogden has, of measuring the pelvis of the primapara at the eighth month, when I have an opportunity. I think that is good practice. I wanted to ask the doctor if he depends in these cases upon external pelvimetry or if he uses internal pelvimetry. I have been practicing medicine a good many years in the country and in country towns, and I have never yet met a case which could not be delivered in a normal way; I never have seen a case that required a Cesarean section. I believe that is the general experience of men in the country. These cases of flat pelvis and contracted pelvis occur more commonly in large cities. I wonder how often you meet them in cities like Little Rock? We very seldom see them in the country.

Dr. H. H. McAdams, Jonesboro: Regarding the removal of a portion of the ovary, I have in mind now a lady who was recently operated on by my associate and myself, and there was a removal of the tube at the cornua, and the opening was closed Since that time she has had all the symptoms of acute salpingitis, and every month during her monthly period she has had the most distressing symptoms, so distressing that it will be necessary to remove the other portion of the ovary that was left. So, she is in the hospital now awaiting the second operation to remove that portion of her ovary. She had no especial distressing symptoms before this operation. Whether or not she has had an infection that's causing this trouble, or whether it is due to the partial removal of the ovary, I am unable to say, but, with my limited experience in removal of a portion of the ovary, I am not very favorably impressed with that method of handling the ovary.

Again, I want to comment briefly on the statement that Dr. Ogden made with reference to curettage. That is one of the practices of our profession that has been abused possibly more than anything else of which I can call to mind. Speaking about removing a part of the secundines and things that have remained after labor, that is a procedure that is still practiced by some physicians in this day and time I am sorry to say, by some of them in the State of Arkansas. But, no doctor who understands the distress and danger that follows curetment, especially after confinement, would undertake to do that. I am glad to say that curettage is day by day being relegated to the past. It is one of the evils that we are gradually getting rid of.

Dr. Ogden, in response: Regarding the question of the total or partial removal of an ovary, I don't seem to have received any more information than I imparted. I am still in doubt. I have found these cases come up quite often; I get an abdomen open and don't know exactly what to do. I know pretty well what is going to happen whichever way I go. I thought possibly someone might tell me just what to do in some of these cases where I would not have to dodge that patient on the street every time I meet her afterward.

Regarding Dr. Beck's suggestion as to placenta previa with Caesarean section, I am very well convinced of the superiority of Caesarean section in a hospital case over the high forceps; but it was a question of placenta previa, eclampsia and some of the other conditions that I am still doubtful about. With the podalic version and the Braxton Hicks procedure, bringing the foot down, etc., the maternal mortality is pretty low, and, perhaps, when we get enough figures we may adopt the Caesarean section over that, and save more children, too; but the maternal mortality is higher in Caesarean section, especially after they have had a few big hemorrhages.

Dr. McAdams mentioned the question of curettage in the matter of removing the secundines. I referred more particularly then to the cases of abortion and miscarriage. I will admit that it is undesirable to use a sharp curet in a septic uterus and remove the secundines. They should be removed with the fingers. All of us see these cases where we have to use the open forceps and reach up there in the top for the mechanical removal of this infected tissue. I think that is a question that we cannot say dogmatically that we should curet or should not in these conditions.

Regarding the pelvimeter, in answer to Dr. Douglas' question, I will say that I use external pelvimetry as a routine. At the eighth month, I measure the pelvis externally, if the external conjugate is 20 cm. or over, and if the intercristal diameter is greater than the interspinous diameter, I don't use any internal pelvimetry. But, if the external conjugate is less than 20, or the intercristal approximates the interspinous diameter, then I confirm it by a more careful internal measurement.

I did not mention in the paper what I regarded almost as necessary in the practice; that is, the determining of the position of the child at the eighth month by external palpation. It is an easy thing to do, and pelvimetry is not difficult by any means. If you determine the position of the child, and determine that you have a head or breech presentation, it is going to stay pretty well that way the next four weeks. I think the incidents of trouble at the time of labor is going to be very much less, when we determine the position of the child and the diameter of the pelvis beforehand.

URTICARIA.*

By C. Travis Drennen, M. D.,
Hot Springs.

Urticaria, commonly known as nettlerash or hives, is not a disease, *per se,* but exists as a symptom in many different varieties, in about five per cent of all diseases. The different eruption consists of, rapidly formed wheels, irregular in size and outline, manifesting itself upon any part of the skin, although the parts covered by the clothing are more frequently affected. The face and hands, however, are by no means immune to attack. The intolerable burning, itching and tingling is so intense at times, that the victim of the affliction is so tortured by the flame of hell-fire in which he is enwrapped, that he sometimes expresses himself, as if to die would do him good.

The most common varieties are the acute, chronic and papular. There will be found several sub-varieties, such as U. Bulloso, U. Hemorrhagica, U. Tubroso, U. Factitia and also U. Pigmentoso. The last named variety will not be discussed at this time.

Symptoms.

The symptoms are such that the diagnosis of Urticaria is easily made often by the patient himself or the laity, even before the physician has been called.

Convex elevations of the skin from a quarter to one inch, irregular in outline, red at first, with a white center, usually are the manifestations observed, accompanied, as above stated, with itching, tingling and burning, sometimes similar to those produced by the sting of the nettle, from which it derives its name. It may last an hour or a day and then run its way into the weary weeks, if the cause be not ascertained and removed, thus producing untold suffering to the victim.

Diagnosis.

The diagnosis is easily made and it could not very well be confounded with any other disease unless it be the papular form of eczema in children. Its sudden onset is characteristic and where doubt exists as to its real character, a stroke of the finger nail across the skin will at once remove all doubt; thus showing it up in typical form.

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

Etiology.

There is no doubt but that a neurasthenic base will, as a rule, be found upon which both external and internal causes operate. The more frequent causes provoking symptoms from without, are the stinging nettle, bed-bug, fleas, chicken-lice, mosquitoes and numerous other parasites and insects, as well as chemical substances found in certain dyes.

The greater number of attacks which have come under my observation are provoked by internal disturbances; and this is without doubt the experience of others who have given the subject serious consideration. The ingestion of shell-fish of all varieties in certain persons, is almost invariably followed by an acute attack. There are also many other kinds of food which will produce the same condition. At this point I would particularly mention strawberries, so commonly used at this season of the year. Mushrooms and oatmeal when ingested by certain individuals will be followed by urticaria. I have at present a patient who cannot, and never has been able to ingest a sour orange without invoking this symptom. He has a son nineteen years old who is similarly affected by the same kind of fruit. There are many drugs which will provoke this symptom; but I would rather class quinine as the chief of all offenders.

Pathology.

The pathological finding in urticaria are such as to warrant us in the belief that there is a vaso-motor disturbance, same being produced by auto-intoxication, or some other toxic influence, usually the former. The corium is infiltrated by a material, semi-fluid in character, but the epidermis is not disturbed. The lymphatics and blood vessels are enlarged and there is a marked immigration of leucocytes throughout the cellular tissues.

Treatment.

The chief purpose in presenting this paper is to call particular attention to the treatment of urticaria. This consists chiefly in removing the cause, but until this can be accomplished, I would direct your attention to the great value of local applications in bringing temporary relief. The many and varied agents which have been used for this purpose is sufficient testimony to prove that no one remedy will always avail. The one agent which I have found of greatest value to the greatest number of patients is water applied at a temperature of 96 and 99 degrees Fahrenheit.

First place the patient in the tub, allowing the water to fully cover the body, keeping him immersed from one to four minutes. Then you will observe a complete cessation of all symptoms and with it will come a sigh of relief and expressions of gratitude from the sufferer. Remove the patient from the tub and without drying or rubbing place him in bed between warm sheets and cover with heavy blankets excluding as nearly as possible all air. This will usually give relief for several hours when the proecdure may be repeated. Meanwhile, if case is acute, stomach should be emptied and large doses of epsom salts given every hour until purgation is freely induced. To this add one tenth grain of calomel, best given in tablet form, every ten minutes until ten have been taken. It is also well, in certain cases, to use small doses of atropine hypodermically. We should not forget the idiosyncracies which exist in persons of blonde type lest we "add insult to injury." It is a well known fact that the skin offers the most direct pathway to the central nervous system and when water is applied in the above manner the results are most gratifying.

In sub-acute, chronic or recurring attacks I know of nothing better than placing the patient on an exclusive diet of buttermilk, from three quarts to a gallon daily, for weeks at a time, supplemented by beef-juice from four to six ounces, once daily, at a certain hour. The best manner for preparing the beef juice is to broil about a pound of beef and extract the juice with a meat press and serve with pepper and salt, excluding, of course, the meat fiber. In addition to this I have found the following to be of universal value in such cases:

Dilute sulphuric acid and peppermint water of each two drams; enough saturated solution of magnesia sulphate to make four ounces. One teaspoonful to be taken two or three times daily in a glassful of water.

This is the best taken morning, noon and night, adding to or subtracting from, as necessity may require, in order to keep the bowels open two or three times daily. Also give in connection one-tenth grain of calomel at bed time.

This proecdure, in my hands, has not, as yet, failed to relieve a single patient.

DISCUSSION.

Dr. H. Thibault, Scotts: I am not going to discuss anything but the treatment of this. Urticaria is an angioneuroticedema of the skin, and I have found, not through my own researches, but somebody else's, whose name I have forgotten, that either preparations of the adrenal glands or of the pituitary body by their vasomotor constrictor effect will almost immediately relieve urticaria, when given hypodermically in small doses. I generally give the adrenalin about three or four minims, well diluted, and give it under the skin, for the fact that it is absorbed a good deal more rapidly when injected intramuscularly, and we get the characteristic thumping of the heart from the sudden contraction of the peripheral vessels; while, when given under the skin, it produces an anemia around the site of the injection, and the absorption is slower, and we get more prolonged action.

Now, I have several patients that cannot take quinine at all, even in the smallest doses, without having urticaria, and if, about the time they begin the symptoms, I give them three minims of adrenalin under the skin, well diluted, and repeat that in an hour or two, they will be cinchonized and it will have no ill effect whatever.

Another characteristic of quinine in urticaria is that quinine will produce urticaria on the first day that you give 20 gr., possibly the second day that you give 20 gr., and after that, if you don't drop the treatment—that is, if you keep the patient cinchonised—you can give 30 gr. a day for 30 days, if you want to, without any more urticaria. But, if you drop the treatment, and let the patient eliminate the quinine, immediately on giving it again, no matter in what quantity, you generally have the nettle rash to appear promptly.

Dr. D. W. Goldstein, Fort Smith: I have noticed a number of malaria causing urticaria; and that is the reason, in my opinion, why you will get results from the use of quinine in the treatment of urticaria. You get a patient who will improve under that treatment. We have demonstrated the malarial organism in quite a number of these cases. In regard to treatment I agree with the doctor that the hot bath is good treatment for the local symptoms. To these warm baths I usually add 3 or 4 pounds of bran to the tub of water. Let the patient stay in the tub about 10 or 20 minutes. It is very soothing and I have experienced good results from it.

Dr. O. R. Stewart, Palatke: I have used quinine, and it works admirably. I have given it about twelve days in small doses twice a day, and it will do away with it entirely.

Dr. H. H. McAdams, Jonesboro: I believe the doctor failed to mention urticaria following the injection of some of the serums. Some of the most aggravated cases of urticaria that I have encountered have been those that followed the injection of some of the serums or antitoxins. More particularly the diphtheritic. I know in one particular instance I had a boy who had a very severe urticaria following immediately the injection of several doses of anti-diphtheritic serum. And, in my own case, where I took an immunity dose, in about a week an urticarial eruption appeared around the site of the injection. This was the most aggravating urticaria I had ever had anything to do with, because I had it myself. I lay in bed for about a week, swelled up like a poisoned pup—pardon my expression. It was the most distressing ailment I have had in all my life. It was one condition that forced me to almost make my will, if I had had any property to dispose of.

Speaking about dieting and such things as that in the treatment of urticaria, two or three times during this week that I laid flat of my back with this distressing ailment, I would take such things as milk, and each time I would have a new crop of eruptions, each one seeming to be more distressing than the other. So, I found that after a few days of absolute starvation and the administration of magnesium sulphate every day, that I got relief. I appreciated the doctor's paper very much.

Dr. J. F. Rowland, Hot Springs: This subject is very interesting to me; especially throat involvement. Twelve years ago, about 2:30 o'clock in the afternoon, a young fellow about twenty years of age rushed into the Manhattan Eye and Ear Hospital in New York, where I was doing post work, suffering profoundly from what seemed like asphyxiation; he could not breathe. The surgeon laid the patient on the operating table; and secured a history of eating strawberries an hour and a half or two hours previous to this time. He was just in the act of doing a tracheotomy. Some one suggested, "Give him a hypodermic of apo morphin." They gave it to him. In a few minutes the patient relaxed and ejected these strawberries from his stomach, and it relieved him. In these cases sometimes the throat is alarmingly involved. This young man would have died in a few minutes, possibly, had he not obtained immediate relief. In closing this discussion, I wish Dr. Drennen would state whether or not he had had any of these serious cases of throat involvement in his experience.

Dr. Drennen, in response: I wish to state that it was not my purpose to enter into the various treatments advocated for relief of urticaria, but to bring out directly the influence of water when applied to the skin, upon itching accompanying this disorder.

The suggestion of Dr. Thibault is well taken. I have not used adrenalin.

In reference to the statement made by Dr. McAdams, I venture to say that it was not milk that produced the troubles but the existence of other toxins already within the system. The colon is a great reservoir for all sorts of troublesome enemies.

In answer to Dr. Rowland I will say, "Yes, one of the most disagreeable symptoms is to be found at times operating in both eyes and air passages.

I thank you for your discussion.

ELECTRO-THERAPEUTICS.*

By J. K. Smith, M. D.,
Texarkana.

In the past few years these State meetings, as well as our county meetings, have been without papers on this important subject. This also illustrates that not only are our societies short on papers on this subject, but the average physician is also. There are several factors which have contributed to detract from this particluar line of treatment.

First: I suppose the use of electro-therapeutics by quacks and charlatans has done more to increase its unpopularity with the regular physician than anything else.

Second: The advancement of other lines of medicine, especially surgery, has contributed to its downfall.

Third: Mechano-therapy, osteopathy, chiropractic, now advanced by quacks and charlatans, has caused it to be forgotten by the laity, and the lessened demand for its use by them has also decreased its popularity.

Fourth: Its relegation to the rear in our medical schools where it is given only a minor place in the curriculum has interposed nothing to prevent its disappearance from the therapeutic field.

I shall not attempt to present anything new and startling in the line of electro-therapeutics, and while I do not wish to take any of the glory from Faradism and static electricity, my remarks shall be almost, if not wholly confined to galvanism, and I will say no physician's office is fully equipped for diagnostic and therapeutic work without it has a galvanic current included in the armamentarium.

Before entering upon the subject I shall attempt to make the difference between faradism and galvanism clear. For a simple explanation, will say that the galvanic current gives an even continuous stream of electricity, while the faradic current is vibrating or comes in waves as if the current was turned on and off in rapid succession, or a simpler way is to remember the method given by the late Dr. Archinard of New Orleans, who expressed it by saying the humming current—faradic—was the humbug current.

A great many people have an idea it takes a hero to withstand electric treatment. I have had them come to my office with fear and trembling, when I told them I was going to give them electric treatment; and, no doubt, many failed to come at all for fear of the punishment they thought they were about to receive. I also find patients who tell me that doctor so and so said they could stand a whole lot of electricity, and their manner of expressing it indicated to my mind that they felt highly complimented for being able to perform the feat, and when they had explained to me how it was given and the kind of current given, I felt somewhat like they did, except I felt like they should have a medal as an endurance prize.

Electricity when given properly does not cause any pain, and one should bear in mind that it is quality and not quantity that counts in galvanism. We have two poles, each pole having direct opposite effect, and each one having its own special application. It would be unwise to apply the stimulation negative pole when the sedative positive pole was indicated, no competent therapeutist would give strychnine for convulsions or chloral-hydrate as a heart stimulant, neither would the competent electro-therapeutist apply the negative pole to an inflamed area when the positive

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

one is indicated. I am sure that many failures in this line of treatment is the result of lack of knowledge of the subject.

While this therapeutic agent has been used for most every disease human flesh is heir to, it is not considered a cure-all; but those who are best equipped to judge give us quite a variety of conditions to which it might be applied with great benefit. I shall only be able to give a short resume of its broad and useful field. Taking gyneeology for an example, we have amenorrhea, dysmenorrhea, endometritis, metrorhagia and menorrhagia, all of which are greatly benefited, and in many cases permanently eured by the use of galvanism.

The following case gives an idea of its use and results: Patient, Mrs. P——, age 39, mother of five children, youngest child six years of age. Since last confinement patient had been very irregular, menstruation was more scant each month, and would finally fail to appear at all, when she would beeome depressed, nauseated, and suffer with severe headaches, etc., which was relieved by a curettage to be repeated in three or four months. The curettage was kept up at these regular intervals by a very prominent gynecologist for three or four years. I began giving her galvanism with the negative pole in the vagina and positive pole over the lumbar spine. After the flow was established treatment was begun one week before the expeeted period for several months with permanent results. I have quite a number of similar cases, but this one illustrates the point and repetition would not add to the value of the argument. In the dysmenorrhea of young girls where the ovarian function does not seem to be well established, there is nothing that will give better results than galvansim properly applied. In this condition it is best given by applying the negative pole over the lower abdomen, and the positive pole over the lumbar region. The pad should be large and thoroughly wetted so the maximum current can be given say, about thirty milli-amperes for fifteen minutes every seeond day, beginning ten or twelve days before the expected menstruation. In those desperate cases where the patient seems to be threatened with danger of contracting the opium habit, from having to take heavy doses of narcotie at this time, then premature menpause should be brought about with massive doses of the x-ray current. In dysmenorrhea of young married women where the pain is due to a contracted cervix this can be most effectively overcome by the application of the negative electrode to the cervical canal.

In urethral strictures in the male the proper application of this eurrent is the best treatment at our command and in ehronic prostatitis, galvanism combined with prostatic massage is the treatment par exeellence.

In the diagnosis of certain nervous diseases the use of electricity is indispensable. In the paralysis due to poliomyelitis we have here a prognostic sign of the greatest importance, for muscles which are responsive to the powerful faradic current have a fair chance for reeovery. And here, too, in the use of electric treatment properly and persistently applied, we have our best hope of benefiting the patient.

The study of the various reflexes and the reaction of nerve degeneration is entirely too long for the scope of this paper, and I only hope to stimulate the study of this important braneh of medicine by a casual referenee to the field of its many applications.

The removal of small nevi and epitheliomas are quickly, easily and painlessly done and with it the removal of superfluous hair is a simple procedure, and though the average physician feels it beneath his dignity to do such an apparent trivial act, I have found many patients more grateful for this little performance than they have been when I have performed extensive and serious operations. It is no wonder that we find patients going to all kinds of schools of isms and pathys when we fail to equip ourselves for the very things for which they are most desirous.

I have been convinced that much of the physician's work is wholly psychical and in this I do not wish to exclude surgery. Many operations are performed successfully, in which the patient made a full and complete recovery. Often it is not due to the pathology removed, but the mental attitude of the patient following the operation. We feel in this day of enlightenment that the day of the waving of the magic wand to dispel disease is in the past; but when we eonsider the fakes and false hopes the people chase after in the search of health we know that the days of mystery and obscurity in medicine have not yet departed. Each branch of medicine is important. The truly scientific physician should seek after scientific methods for the diagnosis and cure of disease.

The object of this paper is not to take up a lengthy discourse of the possible therapeutic possibilities of any particular dogma; but to try to stimulate the study and the application of the scientific and established principles which are known to be of benefit to mankind. I am not giving this experience as one who poses as a specialist in electro-therapeutics; but from the standpoint of a general practitioner and one who acknowledges his errors of omission rather than the sins of commission.

DISCUSSION.

Dr. G. E. Cannon, Hope: On the subject of electricity, he did not dwell upon anything except galvanism. I think that is one thing that each of us should study more than we do. I believe we would get a great many results from galvanism that we could not get from almost anything else.

The subject that he touched upon there reminds me of a little story that I heard Dr. Neiswanger, of Chicago, tell once about a young man who had just graduated and gone to a town in Southern Illinois. The young doctor put in a galvanic electrictiy equipment, and Dr. Neiswanger told him if he had a condition of delayed menses, or a trouble of that kind, or painful menstruation, to use it, and told him to use not over twenty milliamperes. One day a patient came in with just that condition, and he had forgotten how much galvanism the doctor told him to use. He didn't know very much about it, except he knew how to use it. So, he turned on his machine up to 75 milliamperes. After treating her, he told the patient to come back three days later and get another treatment. Three days later the patient did not appear. He didn't see the patient for ten or fifteen days. He forgot whether he used too much electricity or not. He was uneasy, too, for the return of his patient. About fifteen days later he saw the patient at the postoffice, and mentioned to her that she had not returned. She said, "Doctor, I didn't see any use to return; because I was all right, and did not need to come back. My menses came on after the treatment without a single bit of pain. I never got such relief from anything in my life as I did from that!"

I have found galvanic electricity more beneficial in cases of sciatica than anything I have ever used. I can relate a number of cases I tried it upon. One case possibly twelve months ago, in an old lady sixty-five or seventy-five years of age. Three treatments relieved her. And, about two months ago I saw her with intercostal neuralgia. She said she was coming to the office for treatment, because she got so much relief from the other. I tried to keep her from coming. I told her I didn't believe I could give her relief like I had the other, but anyhow she came and demanded the treatment.

They will get results. An office can be equipped with a galvanic current without any great expense. And, if we have no electricity at all, let us put in a galvanic current in our office so that we may study it and get better results and do some things to patients that are going to somebody else.

Dr. L. P. Gibson, Little Rock: I can answer that. A friend of mine a few years ago visited the neighboring city of Memphis, and in a doctor's office he saw a very wonderful display of electrical appliances, and he asked him, in his scientific investigation, "Doctor, do you get satisfactory results from your electricity?" "Results, hell! I get two dollars for every visit.."

Dr. Smith, in response: I don't believe I have anything to say, any further than I hope it is not all a fake. Everything about medicine, I hope, is not a fake, as the doctor would suggest. I believe that the patients are benefited a great deal by the use of the electric current, especially galvanism.

Because we do not believe in it is no good reason why someone else may not get results from it.

HOW MUCH IS LIBERTY WORTH TO YOU?

This is a question that every American should ask himself or herself. For generations we have boasted of our love of liberty. We have called our country "The land of the free and the home of the brave." It has been proved in other wars that this was not a mere empty boast by our fathers and our forefathers. But the question of how much is liberty worth to this generation has not yet been fully answered.

It is going to be answered nobly by those who serve under the colors. Many of them will answer with their death. It is going to be answered and answered clearly by others who serve their country as best they may. It is going to be answered by others still who, unable to render personal service, have yet furnished their government the means to prosecute the war.

The number of subscribers to the Liberty Loan Bonds is going to be an index of the love of liberty of the American citizenry of today. The list of Liberty Loan Bond holders is going to be a directory of the patriots of America.

"It is plain enough how we were forced into the war. The extraordinary insults and aggressions of the Imperial German Government left us no self-respecting choice but to take up arms in defense of our rights as a free people and of our honour as a sovereign government. The military masters of Germany denied us the right to be neutral. They filled our unsuspecting communities with vicious spies and conspirators and sought to corrupt the opinion of our people in their own behalf. * * *

"Much as we had desired peace, it was denied us, and not of our own choice. This flag under which we serve would have been dishonoured had we withheld our hand."—Woodrow Wilson, President of the United States.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

NEXT MEETING OF THE STATE SOCIETY, JONESBORO, MAY, 1917.

Editorials.

THE MEDICAL PROFESSION OF AMERICA MUST SUPPLY ITS QUOTA OF DOCTORS FOR THE ARMY.

In round numbers, there are about 150,000 physicians listed in our medical directories. Deducting from this number 50,000 names of those who are not in practice or are physically incompetent, there are 100,000 doctors that should be available. Of this number the Surgeon General's Office requires 20,000, or one-fifth of the active practitioners, as officers in the Medical Reserve Corps of the United States Army.

The unfounded and possibly maliciously circulated reports of the casualties among the medical profession in the armies abroad have deterred many from applying for commissions. In reality the number killed on the entire Western front from the beginning of the war to June 27th, 1917, a matter of three years, was 195.

The lowest commission offered a doctor is first lieutenant, which draws in pay $2,000 a year; captains receive $2,400 and majors $3,000. The cost of equipment is about $150.00 to $175.00, according to the desires of the individual. As in civil life, some of us are satisfied with a $25.00 suit of clothes, while others pay $50.00, and this applies to a medical officer in purchasing his outfit in the way of uniforms, blankets, etc.

The individual outlay when once in the service is principally your expenditure for food, or mess as it is called in military circles, and this will average about $25.00 a month, or about $300.00 a year, meaning that a first lieutenant should have at the end of the year, or to send home to his family or bank, about $1,700, a captain about $2,000 and a major at least $2,500.

While this information is of interest to those contemplating applying for commissions in the Medical Reserve Corps, the fact remains that in America we have more than a sufficient number of doctors to adequately supply the demand of the Surgeon General's office without hardship to the civilian population.

The need of doctors is not alone for the mobile Army, but also in Concentration Camps, Evacuation Hospitals, Base Hospitals and on Transports. It is of decided advantage to volunteer your services and receive the ben-

efit of the very necessary training accorded physicians in medical training camps. It is a safe assumption that for those who receive such training and show their aptitude for the service, advancement will be rapid.

Applications for commissions in the Medical Reserve Corps will be sent to you by your local examining board or by the editor of this Journal. Apply for your commission now. Your country needs you.

AMERICAN EFFICIENCY.

German efficiency has been held up as a degree of excellence unattainable by a Democracy. The accomplishments of the United States since April 5th last refute the truth of the claim. In the short space of time since that day the United States has accomplished the following:

Declared a state of war as existing between this country and Germany;

Seized 91 German ships and begun repair work on them;

Authorized unanimously a war fund of $7,000,000,000;

Appropriated $600,000,000 for merchant shipping and as much for air fleets;

Agreed to loan our Allies $3,000,000,000 and advanced them a large proportion of that sum;

Passed a selective draft law and in a single day registered nearly ten million men for military service;

Enlisted 600,000 volunteer soldiers in the Regular Army and in the National Guard of the States;

Sent a Commission to Russia to aid Democracy there and a body of railroad men to Russia and another to France to advise and assist in railroad transportation in those countries;

Begun the construction of 32 camps for our soldiers;

Sent to England a fleet of destroyers and to France a detachment of troops;

Authorized and now enforcing embargo whereby our enemies will receive no more food or material from us;

Passed a food conservation law;

Organized many voluntary commissions and boards who are aiding the government and the people in the speeding up of work, conservation of food, and other national movements;

Drafted by lot 687,000 men for military service;

While the government was accomplishing these things the American people have loaned the United States $2,000,000,000 and offered $1,000,000,000 more, over four million citizens subscribing to the loan.

In addition they have given over $100,000,000 to the American Red Cross and $3,000,000 to the Young Men's Christian Association.

All these things were accomplished while our soil was not invaded or even threatened with invasion and without any disturbance of business conditions. All was done with the calm determination and judgment of an earnest, patriotic people, performing a service for civilization and mankind and maintaining the rights, the dignity, and the honor of the greatest nation in the world.

The German leaders described America's entry into the war as a bluff. This is our answer.

The German Imperial Government was nearly fifty years in perfecting its military efficiency. In less than four months the American Republic has made such strides as to indicate that in less than two years' time the boasted superiority of German efficiency will have been discredited. There is such a thing as American efficiency, and time will prove that German efficiency can not withstand it, fighting as it is for liberty, justice, and humanity.

Editorial Clippings.

THE AGE OR PATRIOTISM FOR AMERICAN PHYSICIANS.

It is announced that about eleven thousand medical men in this country have been recommended for commissions in the Medical Reserve Corps. Of these, 1,150, or about ten per cent, are under the age of thirty-five years; ninety per cent are over that age. The military authorities have repeatedly announced that men under thirty-five are wanted for foreign service. There are about 45,000 young men in the medical profession under the age of thirty-five, and 1,150 have so far responded, or less than three per cent! Is the conclusion to be drawn that men under thirty-five, so far enrolling in the proportion of one to nine of their seniors, are unpatriotic? We are loath to use the term "slacker," for surely young Americans are not different from the youth of other countries, and there must be some lack of understanding to explain their delay in falling in.

In a few days there will be nearly a million men under thirty-one enlisted for the firing line. They will need ten thousand medical officers under the age of thirty-five to take care of them, while they are in training and when they are at the front.

Put in other terms, there will be one hundred young men ready to give their lives for the honor of these United States, bearing the brunt of battle, and they are asking that just one young medieal man shall serve behind the firing line, while they do the fighting.

Louisiana so far has only supplied five per cent of its medieal profession for the serviee; most of these are over thirty-five years of age. Instead of a little over one hundred Medical Reserve Corps offieers, Louisiana should have at least four hundred in uniform.

What are you going to do about it, young men of the South? Are the traditions of the medical profession to be saerificed at the altar of selfishness, and will it become necessary to impose a forced conscription of medical men under thirty-five to satisfy the present urgent need? Already such a plan is diseussed—but it should never come to an issue.

If there are forty-five thousand medical men of the eligible age, why have only 1,150 responded? Why should such a situation prevail? You upon whom the inferenee falls should give it the lie by a patriotic response whieh will for all time dispel the thought that in you rises no thought of loyalty, to eountry, God, or home! What are you going to do about it?—New Orleans Medieal and Surgical Journal.

Abstracts.

SKIN CANCER.

An analysis of forty-three cases of skin cancer is published by S. E. Sweitzer, Minneapolis (*Journal A. M. A.*, July 21, 1917). There were twenty-eight males and fifteen females, the ages varying from 27 to 86 years, and the tumors were all loeated on the faee, neck or ear. Most of them were around the nose or on the eheeks. The lower eyelid was involved twice, the temple twiee and the lower lip four times. Two of the latter were eredited to smoking, one to a eold-sore and one to seborrheie keratosis.. He has found that eases involving the inner canthus of the eye are very hard to eure, especially if involving the orbit. Seborrheic keratosis was the most frequent cause in the whole series, about 30 per cent. being credited to it. Aeute injury such as razor cut or scratch were responsible for seven, and three cases were direetly due to pinching out a blaekhead with the fingers. This gives ten eases due to one acute injury, about 25 per eent, of the total. Repeated injuries are often credited with the production but Sweitzer is surprised with the high pereentage of single injuries or precancerous dermatosis or chronie irritation. The high pereentage due to acute injury would lead one to suspect either an infectious origin or a displacement of eells at the time of injury. The treatment nsed was that with radium. Thirty-four patients are cured to date; four are still under observation and should recover. Two had recurrenees, and one patient he says was direetly stimulated. The most important part of the eancer problem is prevention and he judges that from this analysis all but the ten cases due to an aeute injury could have been prevented. Hence the importance of early removal of all lesions on the faee and hands, speeially such as seborrheic keratoses, warts, moles, pimples, angiomas, etc., and this removal is particularly important in people over 50 years of age. Skin cancer should be suspected in any uleer of the faee or extremities not healing readily under the usual treatment. Treatment should be instituted early when the lesions are small and an extensive destruction has not occurred. Cases are tabulated showing the location, duration, etiology, treatment and its results.

UNNECESSARY OPERATIONS.

After remarking on the progress of surgery and stating his belief in the competeney of most operating surgeons, A. D. Bevan, Chicago (*Journal A. M. A.*, July 28, 1917), says the great inerease in surgieal operations has brought with it the new problem of unnecessary operations and ineompetency of the operator in many cases. Those who are aetively in touch with surgieal therapy, who see a large number of surgieal eases and who come in contact with a large number of men doing surgieal work, eannot bnt be impressed that there is a certain considerable number of operations being performed that are needless and unwarranted and that there is a eonsiderable number of men operating without being qualified to do the work. His impression is that the eondition is due to three

causes, ignoranee, dishonesty and bad judgment. A surgeon is legally a eontraetor with the patient, agreeing to give the patient the benefit of a knowledge possessed by the professors of the knowledge and art of surgery in the plaee and at the time the services are rendered, and agreeing also to give the patient the benefit of his best judgment and due diligenee and the benefit of established and accepted methods of praetiee. As regards honesty the golden rule is a good one to follow. The surgeon should not operate on a patient for eonditions for which he would not be operated on himself. As far as good judgment on the one hand and surgieal tangents and obsessions on the other, it is necessary to remember that the praetice of surgery should be the practice of eommon sense. The three absolutely essential eharacteristics of the safe surgeon are honesty, good judgment and seientifie training. He asks what shall be done about the operations that are done apparently without regard to these essentials and the answer he thinks would be to handle in a general way that problem of surgical therapy as the American Medical Assoeiation has handled and is handling the problem of medical therapy, that is, by a committee or counеil on surgieal therapy whose business it will be to analyze and report on these problems from time to time. There are at least two large problems involved: (1) that of unnecessary and unwarranted operations, and (2) that of operations done by ineompetent men. Surgical problems should be attacked as are pieees of clinical research, not from a single point of view or by a single man. The problem of operations done by incompetent men is largely an edueational one and also in a sense a moral question, and he believes it should be taken up as such by the Amerieau Medical Association.

MEDICAL SERVICE IN THE WAR.

At the request of some leading medieal men in this country, Dr. T. H. Goodwin of England deseribes the organization of the medical service of the British army on the western front. With each battalion of infantry, regiment of cavalry, or brigade of artillery is a medical offieer with a small detachment of medieal and sanitary personnel, and suitable medical and surgical equipment. Before an action this officer forms a "regimental aid post" in a dugout or sheltered position to which the wounded of his regiment are brought by the regimental stretcher bearers where their dressings are applied, fractures immobilized, etc., and after a short stay are removed by the field ambulance *bearer* division to advanced or main dressing stations which are formed by the field ambulance *tent* division. The means of transport with the field ambulance bearer division consists of twenty-seven stretcher squads, each of four bearers with a stretcher, seven motor ambulance wagons, and three horse ambulance wagons. From the dressing station the wounded are eonvoyed by the motor ambulanee convoy, consisting of fifty ambulance cars with four medical officers, to the easualty clearing stations, where a large amount of surgery is done. Patients with wounds in their abdomen or head are brought back from the front as quickly as possible for early operation. The casualty clearing station is always near a railway station and the wounded are conveyed thenee by ambulance trains to the stationary and general hospitals at the base or on the lines of communication. While definite rules eannot be laid down as to distanees the following can be aceepted as an average: From the front line trenches to the regimental aid post, 500 yards or more; regimental aid post to advanced dressing station, half a mile to 1 mile; advanced to main dressing station, 1½ miles; main dressing station to easualty clearing station, 5 miles. The amount of medical supplies required in modern warfare is very large and in addition to these are almost innumerable articles outside of the authorized equipment which are of immense value for the comfort and diversion of the patient. He speaks of the value of the Red Cross Service in giving aid to the regular army medical corps and speaks of the cordial eo-operation of the tactful army surgeon with the fighting officers. The subject of sanitation is always a live one and the opportunities for professional work and experienee are very great. In conclusion he speaks of the shortage of medical men and the consequent inereasing demand. In several districts in England there is only one physieian left to every 5,000 inhabitants. On the western front alone since the beginning of the war there have been 195 medieal officers killed in aetion, 707 wounded and 62 deaths from disease. He also speaks appreciatively of the aid furnished by the United States. Six base units from the United

States are now hard at work in France and a total of 253 medical men and 434 nurses have already gone over.

GUNSHOT FRACTURES.

J. R. EASTMAN, Indianapolis (*Journal A. M. A.*, July 28, 1917), gives his experience with 500 cases of gunshot fractures of the humerus observed in an Austrian military hospital. Nearly every gunshot fracture of the bones of the extremities is compound and infected, and the question of treatment is therefore a more difficult one. Four measures are of value: (1) reposition brought about in the most gentle and cautious manner; (2) the most precise and uninterrupted immobilization undisturbed by change of dressings; (3) a supporting appartus, allowing free access to the injury; (4) such apparatus as requires the least technical skill and experience. The obstacles in the way of securing good immobilization of gunshot fractures in the humerus are sometimes insurmountable and the infection must be treated without regard to the position of the fragments at first; but in most cases immobilization is possible and extension also, even if it be only gravity extension due to the downward pull of the heavy swollen member. Drainage is better when the bone ends are in proper position and the reposition of fragments is easier before the scar formation has hardened and shortened the soft parts. In many gunshot humerus fractures circular constriction of the arm seems best to be avoided and the added weight of a plaster cast or the heavy wire splints allowing free access to the wound gives traction by the gravity pull alone. Eastman illustrates some of these splints. More important, however, is the principle that each case requires individual consideration and the splints must be adapted to the special need. In treating the infection and removing infected clothing fragments, etc., it is often desirable to use hot wet antiseptic dressings and this can be done with the Thomas splint. Dakin's neutral solution of chlorinated soda has proved of great value. It is cheap and highly bactericidal. Bedridden cases with extensive infection may be treated by a continuous through and through irrigation, as in infections of the lower limb. A solution of aluminum acetate (Burow's solution) is also popular in Austria for the continuous bath. The open method of treating fracture wounds has been of great value, avoiding frequent painful changing of dressings, etc. In good weather the exposure of infected gunshot wounds to sunlight for several hours daily has been utilized. After infection has subsided more forcible methods can be used in those cases of severe infection demanding postponement of all efforts to correct deformity until fixation of the fragments in faulty position has become so firm as to exclude extension treatment, open operation is the only resort. The Lane plate, wiring, bone peg and dowel graft methods are all useful in appropriate cases. Eastman mentions more especially the Lane plate as more generally useful in many cases. It has the advantage of being more easily removed in case of reinfection, which is greatly dreaded by the Austrian surgeons.

Personals and News Items.

Dr. C. E. Robinson has moved from Little Rock to his former home in Clarksville.

Dr. W. H. Shipman has moved from Montrose, Ark., to Bartlesville, Okla.

Dr. E. E. Barlow and Dr. J. A. Thompson of Dermott have been appointed members of the Board of Health for the city of Dermott.

Our readers are requested to send us marked copies of local newspapers containing matters of interest to the medical profession.

Dr. S. N. Hutchison of Argenta has been appointed resident physician and surgeon of the American Bauxite Co., at Bauxite, Ark.

Drs. Geo. S. Brown of Conway, C. H. Cargile of Bentonville, Don Smith of Hope and Wm. B. Center of Garland, visited in Little Rock this month.

Twelve of the forty-eight members of the Sebastian County Medical Society have applied for duty in the Medical Officers' Reserve Corps.

Mrs. W. B. Welch of Fayetteville has donated Dr. Welch's medical library to the Medical Department of the University of Arkansas, Little Rock.

Dr. J. B. Hesterly of Prescott has returned from Baltimore, where he has been taking a special course in the medical department of John Hopkins University.

On account of the shortage of public health nurses, particularly those qualified to meet

the peculiar conditions, and, especially those found in the South, the Kentucky Board of Tuberculosis Commissioners offers a four-month post-graduate course in public health. nursing. Students may enter at any time. There will be no fees for the first thirty matriculates. Further particulars may be had by addressing Dr. W. L. Heizer, Secretary, Frankfort, Ky.

The war has given a tremendous importance to the whole subject of diet. Food ranks almost with bullets as a vital factor in the great struggle, and efficient utilization of the crops is just as necessary as big harvests. The Carnegie Institute of Boston is to conduct a series of experiments this fall to demonstrate whether men and women cannot maintain their powers on a smaller ration than has hitherto been accepted as the minimum. The Battle Creek Sanitarium has just finished a metabolism experiment lasting forty-five days, with ten subjects. The object was to determine the effect of different diets on the chemical composition of the blood. The results have not yet been tabulated.

The National Board of Medical Examiners held its second examination in Washington, D. C., June 13 to 21. There were twenty-four qualified candidates, twelve of whom appeared for examination, the others having been ordered into active duty between the time of their application and the date of examination. Of the twelve who took the examination nine passed.

The next examination will be held in Chicago, October 10 to 18. The regular Corps of the Army and Navy may be entered by successful candidates, without further professional examination, providing they meet the adaptability and physical requirements.

There will also be an examination in New York City in the early part of December.—J. S. Rodman, M. D., Secretary, Philadelphia.

Paragraph 61.—Teachers, physicians, surgeons, dentists, druggists, may all serve by continuing their peace-time professions until definitely called to other work. So, too, may many in other professions whose age renders action and field service impossible. We shall need to keep our teaching institutions intact, and doubtless the work of nearly every profession will continue, but the work will have to be done by a smaller number of men. Not alone those who go to the front will saerifice; those who remain must carry burdens up to the limit of their strength. In this connection it should be borne in mind that physicians, surgeons and dentists are needed in large numbers for military service.

Paragraph 157.—From the time war was declared, those in positions of authority have urged men at present enrolled in medical schools to continue their work of preparation. This must be emphasized again. The teaching personnel of our medical and student body must be kept at their present work, for upon them depends the welfare of our army and the community in the years to come. It is a serious question whether medical schools should not continue in session throughout the entire year without the usual interruptions of vacations. The same advice is given to schools for dental surgery and pharmacy. Students who anticipate entering the medical profession and in their college work have made preparation for a medical education should be encouraged to continue in their original intention.—National Service Handbook. Issued by the Committee on Public Information. Corrected to July 30, 1917.

The Bureau of the Census is planning to prepare and publish a monograph on the mortality from Tuberculosis, covering the calendar year 1918. To make this work of greater value, an endeavor is being made to obtain the co-operation of all physicians to the extent of carefully recording or supervising the statements of occupations upon the death certificates during that year.

Below are the extracts from the circular letters:

"More accurate and definite statements of the occupations of decedents should be written upon death certificates. Until this is done mortality statistics by occupations will continue to be unsatisfactory.

"The Bureau of the Census is planning for the near future a monograph on tuberculosis. How much more valuable this monograph will be if it is possible to show accurately the occupations of decedents.

"As a physician, you appreciate the importance of such statistics. As a physician you are by education better qualified than the ordinary informant to understand a proper statement of occupation.

"Will you not, therefore, take pains to see that the occupation items upon each one of your death certificates are properly supplies?"

AMERICAN WOMEN'S HOSPITALS.

The War Service Committee of the Medical Women's National Association has organized the American Women's Hospitals for work at home and abroad. The Surgeon-General of the Army and the General-Director of the Department of Military Relief of the American Red Cross have approved the provision made for service to the army and to the civil population. The work will be officially part of the medical and surgical service of the American Red Cross.

The scope of the plan is a broad one. It includes units for maternity service and village practice in the devastated parts of the Allies' countries and hospitals run by women for service there as well as for the United States army in Europe. In this country acute and convalescent cases will be treated in hospitals equipped for the purpose; soldiers dependents will be cared for, interned alien enemies will be given medical aid and substitutes will be provided to look after the hospital service and the private practice of physicians who have gone to the front.

The first units hope to go to France and to Serbia in the early fall.

Headquarters have been established at 637 Madison avenue, New York City. Dr. Rosalie Slaughter Morton is Chairman of the War Service Committee.

New and Nonofficial Remedies.

Borcherdt's Malt Olive: A liquid stated to be composed of olive oil 20 per cent., glycerin 10 per cent. and Borcherdt's malt extract 70 per cent. The Borcherdt Malt Extract Co., Chicago.

Acetylsalicylic Acid, M. C. W.: A brand of acetylsalicylic acid complying with the standards of new and nonofficial remedies. Mallinckrodt Chemical Works, St. Louis (Jour. A. M. A., July 21, 1917, p. 199).

Citresia: Magnesium acid citrate, the hydrated acid magnesium salt of citric acid. A colorless salt, very soluble in water and having a pleasant acid taste. It may be administered in place of solution of magnesium citrate by dissolving 25 Gm. in 25 Cc. syrup of citrate acid and 125 Cc. water. Horace North, New York.

Pasteur Antirabic Preventive Treatment (Harris Modification): An antirabic vaccine prepared from brains and spinal cords of rabbits, dead of fixed virus rabies infection, and standardized by the method of Harris. One dose is given for a period of fourteen days. Each dose is sent out separately. Eli Lilly and Co., Indianapolis, Ind. (Jour. A. M. A., July 7, 1917, p. 39.)

Hay Fever Pollenin Fall-Mulford: A liquid obtained by extracting the protein of the pollen of ragweed, golden rod and maize and standardizing the extract to a definite protein content. This pollen extract is said to be of value in the prevention and treatment of fall "hay fever." It is supplied in four-syringe packages, containing increasing doses of pollen protein and in a one-syringe package, containg the maximum dose. The H. K. Mulford Co., Philadelphia.

Hay Fever Pollenin Spring-Mulford: A liquid obtained by extracting the protein of the pollen of rye, timothy, orchard grass, sweet vernal grass, and red top grass and standardizing the solution to a definite protein content. This pollen extract is said to be useful for the prevention and treatment of spring "hay fever." It is supplied in a four-syringe package containing increasing doses of pollen protein and in a one-syringe package containing the maximum dose. The H. K. Mulford Co., Philadelphia.

Propaganda for Reform.

Tumors in Anilin Workers: Long exposure appears to result sometimes in the development of tumors of the bladder, with or without the symptoms of chronic anilinism. In Germany many such cases have been observed in past years. At the first sign of trouble with urine or bladder in anilin workers, the advisability of careful cystoscopy should be considered. (Jour. A. M. A., July 21, 1917, p. 204.)

Redintol: This is a paraffin mixture for the treatment of burns. It is marketed by Johnson and Johnson, New Brunswick, N. J., with the following statement of composition: "Paraffines 95 per cent., combined with Resina Palaquium and Oleum Picis Liquide." This means little and probably was so intended. Oleum picis liquide is oil of tar and resina palaquium is gutta percha. Simple paraffin would no doubt answer as well as this secret mixture. (Jour. A. M. A., July 28, 1917, p. 306.)

Some Misbranded Nostrums: The following "patent" medicines have been found misbranded under the federal Food and Drugs Act. The curative claims made for them were misleading, unwarranted and false: Poland Wine Bitters, a wine to which emodin-bearing and other drugs had been added. Koenig's Nerve Tonic, claimed to be a natural remedy for epileptic fits, etc. Mrs.. Edward's Infant Syrup, a "baby killer," containing morphin and alcohol. Root Juice Compound, which was not a root juice. (Jour. A. M. A., July 14, 1917, p. 139.)

Low's Worm Syrup: The A. M. A. Chemical Laboratory reports that Low's Worm Syrup, sold by Smith, Kline and French Company, Philadelphia, contains 0.93 Gm. santonin per 100 Cc., or 4.2 grains per fluidounce, and a laxative drug, probably senna. Each drachm (teaspoonful) therefore contains a little more than one-half grain. The preparation, like so many of the worm syrups on the market, is of the usual dangerous santonin-containing type, although no hint is given of the presence of this drug nor any warning that it contains a poison. (Jour. A. M. A., July 21, 1917, p. 225.

Creosote-Delson and Creofos: Creosote-Delson is said to be "beechwood creosote from which the irritating and caustic properties are removed by fractional distillation." It is marketed chiefly as Creofos. Creofos is said to be Creosote-Delson in an emulsion containing hypophosphites. The Council on Pharmacy and Chemistry declared Creosote-Delson inadmissible to new and nonofficial remedies because its identity and its difference from, and asserted superiority over the official creosote had not been established. It declared Creofos ineligible because its composition had not been satisfactorily declared, because the therapeutic claims were grossly exaggerated, because the name was non-descriptive of the composition and because the inclusion of hypophosphites was irrational. (Jour. A. M. A., July 7, 1917, p. 58.)

Venarsen: William A. Wilson, Kansas City, Mo., writes that he has advised the Intravenous Products Company that after using a great quantity of Venarsen, he can see no more effect on the cases treated than if so much water had been administered, and that this is also the report of Don R. Black, pathologist, for Bell Memorial Hospital, University of Kansas. (Jour. A. M. A., July 7, 1917, p. 62.)

Triner's American Elixir of Bitter Wine: The Council on Pharmacy and Chemistry reports that this is a wine to which bitter drugs and laxatives have been added. Though evidently intended for public consumption, it is also advertised to physicians. The composition of this "wine" —some bitter drugs, a laxative and a tannin —containing, constipating red wine—and the advertising propaganda all tend to the continued use of this alcoholic stimulant and thus to the unconscious formation of a desire for alcoholic stimulation. As the medical journal advertisements may lead physicians to prescribe this secret and irrational preparation and thus unconsciously lead to alcoholism, the council authorized publication of its report. (Jour. A. M. A., July 14, 1917, p. 139.)

Some Misbranded Nostrums: The following "patent" medicines have been found misbranded under the federal Food and Drugs Act, chiefly because the therapeutic claims made for them were misleading and false: Quaker Herb Extract, a water-alcohol—extract of an emodin-bearing drug. Payne's New Discovery, a water-alcohol solution containing small amounts of baking soda, licorice and extractive matter from a laxative plant drug. Payne's Quick Relief, chiefly turpentine with cayenne pepper, resin, camphor and chloroform. Quaker Oil of Balm, containing turpentine, cayenne pepper, chloroform, etc. Cooper's New Discovery, a nostrum of the alcohol tonic type, containing 20 per cent. alcohol, some emodin, aloes and a small quantity of oil of sassafras, together with reducing sugars. Cooper's Quick Relief, a liniment consisting of cayenne pepper in alcohol (31 per cent.), flavored with oil of sassafras. Wilson's Preparation, a powder containing largely starch, acacia and sugar, with potassium acetate, calcium hypophosphites and quinin. (Jour. A. M. A., July 7, 1917, p. 58-59.)

The Crucial Test of Therapeutic Evidence: Torald Sollmann points out that if a patient improves after taking a remedy, we do not know that he improved on account of the remedy or as a result of the natural course of the disease or for other reasons. In order that adequate allowance may be made for the natural course of the disease, clinical trials of a medicament should be carried out in one or two ways. The first is the statistical method in which alternate patients receive or do

not receive the treatment. This method is usually of value only when a large number of cases are available, and even then it is limited or doubtful, because it cannot take sufficient account of the individuality of cases. The second method consists in the attempt to distinguish unknown preparations by their effects. In this a patient, or a series of patients, is given the preparation which is to be tested, and another preparation which is inactive, or a preparation the effects of which are to be compared with the first. In either case the investigator does not know when he is giving one or the other, and tries to distinguish them by their effects. If one drug is really of value and superior to the other, this "blind" test will surely bring out such efficiency or superiority. (Jour. A. M. A., July 21, 1917, p. 198.)

Married.

Biscoe-Goree.—The marriage of Dr. Gibbs Biscoe of Pendleton, to Miss Evan Goree of Pine Bluff, took place in Pine Bluff on Wednesday, July 25, 1917.

Dr. and Mrs. Biscoe will be at home after August 15, Pendleton, Ark.

Obituary.

Dr. Thomas W. Hurley.—Dr. Thomas W. Hurley of Bentonville, aged eighty-three, died July 15, 1917, at the home of his son, Dr. Charles E. Hurley. He was surgeon in the Confederate army and a former president of the Arkansas Medical Society. He is survived by his wife, three daughters and two sons.

County Societies.

POPE COUNTY.

(Reported by J. R.. Linzy, Sec'y.)

The Pope County Medical Society met at Atkins in the office of Drs. Montgomery & Kolb at 2 o'clock p. m. July 10th. Members present: Drs. L. Gardner, J. Wright, R. L. Smith, J. F. Hays, R. M. Drummond, W. A. Montgomery, R. W. Darr, B. Kolb, E. P. Griffin, T. R. McCartey, J. R. Linzy, and the Counselor, Dr. Earl Hunt.

Dr. Darr furnished a patient as a clinic. Dr. J. F. Hayes read a paper on "Intestinal Stasis," which was freely discussed by several of the members. Dr. Lowery of Appleton was elected to membership. Meeting adjourned to meet at Russellville on the 24th inst.

FRANKLIN COUNTY.

(Reported by Thos. Douglass, Sec'y.)

The Franklin County Medical Society held a good meeting July 3. Dr. Porter presided. There were present: Drs. Harrod, T. B. Blakely, Warren, Blackburn, Higgins, Davis and Douglass.

The question of contract practice rendered important because Dr. Allen has been taking contracts at $1.50 per month at Altus, was thoroughly discussed and condemned as against the interests of the profession.

At a former meeting it was decided that the members of this society should refuse to consult with any doctor doing contract practice. A Board of Censors was appointed to confer with a similar board of Johnson County to secure co-operation in the matter. There were some interesting case reports and discussions.

Book Reviews.

Cancer, Its Cause and Treatment. By L. Duncan Bulkley, A. M., M. D., Senior Physician to the New York Skin and Cancer Hospital. 12 mo. Cloth. 250 pages. Published by Paul B. Hoeber, 67-69 East 59th St., New York. Price, $1.50.

In this book Dr. Bulkley presents a strong argument, with reasons, for the constitutional origin of cancer and the treatment of its basic cause, while acknowledging that in some instances it may be necessary or best to remove the local lesion, or product of the disease.

The Practical Medicine Series.—Comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A. M., M. D. Volume I. General Medicine.—Edited by Frank Billings, M. S., M. D., assisted by B. O. Raulston, A. B. M. D. Series 1917. Price of this volume, $1.50. Price of the series of ten volumes $10.00.

This volume begins with a brief review of research work, experimental medicine and laboratory technic, followed by a description of the infectious diseases, diseases of the chest, heart, blood vessels, blood and blood-making organs, ductless glands, metabolism and kidneys.

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D. Volume I., March 1917. Published by Lea & Febiger, 706-710 Sansom Street, Philadelphia, Pa. Price, $6.00 per annum.

The contents of this volume are as follows: Surgery of the Head and Neck, by Charles H. Frazier, M. D.; Surgery of the Thorax, excluding diseases of the Breast, by George P. Muller, M. D.; Infectious Diseases, including Acute Rheumatism, Croupous Pneumonia and Influenza, by John Ruhrah, M. D.; Diseases of Children, by Floyd M. Crandall, M. D.; Rhinology, Laryngology, and Otology, by George M. Coates, A. B. M. D.

THE SURGICAL CLINICS OF CHICAGO.—Volume I., Number 2, with 99 illustrations. Published bi-monthly by| W. B. Saunders Company, Philadelphia. April, 1917. Price, per year, $10.00.

Fifteen clinics are described in this issue. The first is by Dr. A. J. Ochsner, Augustana Hospital, on Carcinoma of the Breast: Diagnosis; indications for operation and technic of the radical cure. Dr. Ochsner cautions physicians against removing portion of the growth for the purpose of making a microscopic examination unless this were done by means of the electric cautery or the Paquelin cautery, because he has encountered many cases in which the removal was followed by death of the patient from metastases.

CARE OF PATIENTS UNDERGOING GYNECOLOGIC AND ABDOMINAL PROCEDURES, BEFORE, DURING AND AFTER OPERATION.—By E. E. Montgomery, M. D., Professor of Gynecology in the Jefferson Medical College, Philadelphia. 12 mo. of 149 pages, with 61 illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $1.25 net.

While the author of this book was convalescing from an operation last summer, he decided to prepare for his assistants some typewritten instructions which, as the work progressed, he found it necessary to extend, until this little volume is the outgrowth. If the suggestions are intelligently followed it will prove of great value to the young gynecologist by making easy his early steps alone in the field of pelvic and abdominal surgery.

MEDICAL STATE BOARD QUESTIONS AND ANSWERS.—By R. Max Goepp, M. D., Professor of Clinical Medicine at the Philadelphia Polyclinic; Assistant Professor of Clinical Medicine, Jefferson Medical College. Fourth edition, thoroughly revised. Octavo volume of 724 pages. W. B. Saunders Company, Philadelphia. 1917. Cloth, $4.25 net.

Some additions and revisions in the text of the present fourth edition include the newer laboratory tests which have augmented the already extensive list during the last few years, particularly in the study of the kidneys and of disturbances of metabolism.

The book provides a very convenient compend for the use of those who wish to prepare themselves for State Board and other medical examinations.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEYS.—By Robert H. Greene, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M. D., Professor of Clinical Medicine, University and Bellevue Hospital Medical College. Fourth edition, thoroughly revised. Octavo of 666 pages, 301 illustrations. W. B. Saunders Company, Philadelphia, 1917. Cloth, $5.50 net; half morocco, $7.00 net.

This volume is a conjoint product of a surgeon and a physician. Equal attention is given to both the medical and surgical aspects of these diseases. They have incorporated such methods as they personally have found most practical and useful, all of which they believe may be successfully employed in the hands of any well-equipped practitioner, familiar with modern medical and surgical technic.

THE MEDICAL CLINICS OF CHICAGO.—Volume II, Number III. November, 1916. Published bi-monthly by W. B. Saunders Company, Philadelphia. Price per year, paper, $8.00; cloth, $12.00.

This volume describes the interesting cases of Chicago's leading clinicians. One of unusual value is that of Dr. Isaac A. Abt, Michael Reese Hospital on "Infantile Paralysis," in which he gives the history, epidemiology, etiology, peculiarities of the virus of poliomyclitis, points of entrance, viability, method of spread in the body, symptomatology in detail in the different stages of the disease, clinical classification of media,, eight types of cases, prognosis, differential diagnosis, pathogenesis, prophylaxis, treatment in the acute stage, proper care of paralyzed muscles, present status of the serum treatment.

ACETYLSALICYLIC ACID, NOT ASPIRIN.—While Aspirin-Bayer has been omitted from New and Nonofficial Remedies, the product is retained under its scientific name, Acetylsalicylic Acid, and standards are provided to ensure the reliability of the market product. The aspirin patent expires in February, 1917, and after this time other manufacturers may make and sell the product. One firm's brand, that of the Powers-Weightman-Rosengarten Company, has been accepted for New and Nonofficial Remedies, 1917. Hereafter physicians, when prescribing the compound, should use the scientific name "Acetylsalicylic Acid" (Journal A. M. A., January 30, 1917, p. 201).

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., SEPTEMBER, 1917. No. 4.

Original Articles.

SOME OF THE MOST IMPORTANT MEDICAL PLANTS INDIGENOUS TO THE STATE OF ARKANSAS.*

By J. T. Clegg, M. D.,
Siloam Springs.

It is an instinct in primitive people, even also in some of the lower animals, to resort to the use of herbs or plants as remedies for illness or injury. Nor has man become so scientific but that he finds therapeutic value in many products of vegetable origin examples, of which it is unnecessary to relate. I think it is not a great error to say that every plant known to man contains a toxic principle of varying degrees of toxicity, according to the specific nature of the plant, from the most deadly poison to that of being edible in more or less limited quantity even beneficial as a food. The toxicological effect of the active principle of a plant will be different on different animals. For instance, aconite will hardly kill a bovine and strychnine, while very deadly to a carnivorous bird, requires to be given in large quantities to kill a gallinaceous fowl. This fact is so well known that farmers' wives some times feed strychnine to chickens for the purpose of killing hawks that are preying upon the brood. There are certain plants when eaten by a cow will prove harmless to the mother while the cow is secreting milk, that will kill the sucking calf and will also kill the cow when not secreting milk or when the cow is dry.

The color of an animal will sometimes influence the effect of the poison of a plant, white sheep and pigs are injured by eating certain plants, while the colored ones escape (Darwin). Thus it appears that there are many factors that may determine the therapeutic value of a plant. Derivatives of plants are perhaps not as much sought after for medicine now as formerly, on account of coming into use so many coal tar products and synthetical compounds, many of which, however, are of doubtful value and are inclined to remind one of illegitimate children daddied by an experimenting chemist and mammyed by unscrupulous advertising exploiters, who are usually commercial prostitutes.

The flora of Arkansas is very abundant. Every natural order of plant life on the North American continent has a representative in the state; but I will only call your attention to a few of the best known species.

Chenopodium, American Wormseed and Jerusalem Oak: One of the best anthelmintics, the oil of which promises to supersede thymol as a remedy for hookworm. It grows abundantly in all parts of the state.

Cimicifuga Racemosa: Nerve sedative alterative, useful in chronic muscle pain hysteria, etc.

Cypridium, Ladies' Sliper: One of the most delicate of the Orchidacea. Nerve stimulant and tonic.

Eupatorium Perforiatum, Boneset, Arbitter Tonic, Diaphoretic and Antirheumatic.

Gelsemium Sempervirens, Yellow Jasmine: One of the most beautiful climbing plants in the South, forming vast festoons from tree-to-tree. In its flowering season, during May or early June, the rich golden yellow blooms exhaling a fragrance that permeates the air for an incredible distance, intermingling with the dark, rich evergreen lanceolate leaves makes a picture that a lover of the forest can never forget. It grows abundantly in the Southern half of the State. A powerful nerve sedative, febrifuge, antispasmodic, spinal nerve depressant and malarial antidote, very poisonous in over-doses. Medicinal properties reside only in the fresh, undried green root and are best extracted by dilute alcohol. Gelsemium is a very valuable medicinal plant, whose proper-

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

ties should be more extensively investigated.

Hemamalidis, Witchhazel: Astringent and local sedative.

Hedionia—Pennyroyal, Aromatic and stimulant.

Hydrastis —Golden Seal: Not common but found in the State.

Iris or Blueflag—Purgative and emetic.

Lobelia Inflata—emetic and antispasmodic.

A number of the Labiate order of the menthea all stimulant aromatic and carminative.

Podophyllum—May Apple — Purgative: Grows abundantly in all parts of the State.

Prunus Virginiana—Wild Cherry: Uniting the properties of a tonic with calmative effect.

Rhus Glabra—Acid astringent.

Rhus Toxicodendron—Poison Ivy, Alcohol irritant with narcotic properties.

Speglia—Pink Root—Regarded as one of the most efficient and safest anthelmintics.

Sanguinaria—Blood Root Emetic, expectorant with narcotic properties.

Virburnum Prunifolium—Black Haw: Said to be a uterine sedative.

Arelia Spinosa—Hercules Club: Properties not well known, contains perhaps an alkaloid with local anesthetic properties.

Baptisia Tinctoria—Wild Indigo: Valued very highly as an antitoxic in scarlet fever and other septic conditions. The properties of this plant are well worth investigating.

Echinacea: This beautiful species of the Composite family has recently acquired much popularity in the treatment of purulent and other infections.

You will observe that I have enumerated comparatively few of the medicinal plants of the State, though I have included a respectable percentage of the botanical Materia Medica, recognized as official.

The practice of medicine would be almost impotent without the use of vegetable drugs, opium, digitalis ipecac and quinine are absolutely indispensable in the treatment of conditions for which they are indicated. The therapeutic effects of botanical drugs have not been studied or given the scientific research in recent years that is due them. Our Eclectic friends have appeared to devote more attention to the medical properties of plant life than others, but not along scientific lines. The Eclectic research has been along lines of specific medication. That is, of ascertaining what drug will relieve certain symptoms or conditions. This of necessity must be purely empirical. In studying the medicinal properties of plants the first thought is why do plants possess active principles such as alkaloids and resinoids. What use are they to the plant, and how are they formed? The primitive idea that they were stored in the plant by Divinity for the healing of disease can not be entertained for a moment by a man of science. It is a fact that if a plant has any properties of therapeutic value in the treatment of disease, it must be by accident or coincidence and not by design. Doubtless in the order of organic development bacteric life antedated plant life as plant life antedated animal life which more than likely resulted in an inter-dependent function between the different forms of organic matter represented in the three forms that is ometimes auxiliary and sometimes antagonistic, which permits the use one to combat the evil results of another as a consequence of which toxin of certain plants or organisms became useful as therapeutic agents. Research along this line may put vegetable therapy upon a more scientific basis. So far as known to me no one has succeeded in developing an active principle in a plant by cultivation. In a few species the active principles have been partially cultivated out; as in the potato, tomato and perhaps other varieties of the solonacea, and also some of the roses. It is well known that some of the rose family are rich in hydrocyanic acid, for instance, the almond, the peach and wild cherry. Perhaps I cannot conclude this subject better than by copying an extract of a letter from Dr. Robert S. Woodward, President of the Carnegie Institution of Washington, D. C., replying to questions concerning the formation of active principles in plants. "The questions you raise are questions which have received much discussion amongst biologists, including the great Darwin. They are questions which may be adequately understood at present only when considered in connection with the general doctrine of evolution and all that it implies. The complexity of plant development is so great, however that the question still most pressing is not so much why or for what purpose, as what are the existing facts in plant develop-

ment. Perhaps the best we can hope for in our time considering the vast aggregate of problems presented by the universe is to improve somewhat the accuracy and completeness of existing facts."

Dr. Woodward doubtless expresses the chaotic condition of biological science, but the medical man should not be discouraged from collecting all facts possible concerning the therapeutical properties of our native plants. Essentially at the present time, when we may be driven to most any expedient to obtain medicines of value.

I have purposely omitted the balsams and tonic-bearing trees, as the sweet gums, pines cedar and oaks, all of which are very abundant in the State.

DISCUSSION.

Dr. H. Thibault (Scotts): Under ordinary and normal commercial conditions of the world, Dr. Clegg's paper would be negligible, because we tramp under foot every day plants whose active principles we import from afar or buy from some other State or from somebody that is making a living out of the manufacture of these drugs, and we pay no attention to the plants. But, under the circumstances that exist at present, with the world at war, and certain avenues of import cut off, the medicinal value of the native plants, of our country and of our State, become more important. As an example, thymol, which has been used almost universally in the treatment of hookworm disease, has been, to a great measure, displaced by the ordinary "Jerusalem oil," from Jerusalem oak that grows in nearly every man's back yard in Arkansas; and we have discovered anew the value of this one particular drug, because the price of thymol has become prohibitive. Another thing in connection with this same subject of hookworm and thymol is that the Department of Agriculture of the United States, working in conjunction with the hygienic laboratory, has discovered that there is more thymol in horse-mint, an ordinary wild plant of Arkansas, than there is in thyme the usual source of the drug; that it is more easily extracted; and that it can be made more cheaply probably in Arkansas, a great deal more cheaper than it is manufactured in the countries that ordinarily manufacture it and export it into the United States. Now, if our commercial relations with other countries are further complicated, this one item may be worth while to some member of the Arkansas Medical Society or some energetic manufacturer. The Statements of Major Cole here yesterday in regard to the enormous percentage of hookworm infection in the regiment from Alabama would indicate at once the importance of further research into the methods of extracting thymol from horse-mint, and horse-mint is one of our universal, every-day plants, that all of us see every summer, and it is very productive of this very valuable and at the present time exceedingly expensive drug. (Applause).

Dr. C. S. Pettus (Little Rock): I feel that this is a paper of such importance that it should not go by undiscussed. In my earlier experience I did a country practice. There I had a brother practitioner, a man who had studied plant growth and plant medication. He administered a great deal of plant growth drugs prepared by him. I had heard of him before I went to the community and was agreeably surprised to find him a man highly educated and thoroughly capable.

As an internist, his results were remarkably gratifying. I could not resist the temptation to doubt the therapeutic value and physiological effect of the drugs prepared by him, because of my own ignorance of plant growth medication.

Cimicifuga, the old black cohosh, was his great sheet anchors. I will always thank this doctor for having educated me to the value of cimicifuga, which I consider one of the most valuable drugs in our materia medica.

Then his devotion to gelsemium interested and somewhat amused me. When he boasted of his ability to produce the physiological effect of his own preparations of gelsemium, I doubted him. In fact, I insisted on the demonstration and he gave a most satisfactory demonstration and the physiological effect of gelsemium. There was never a more beautiful ptosis of the eyelids, after pushing his prepared drug.

I was asked to call the doctor in consultation one time. The patient was a neurotic. Chloral, bromides and other nervous sedatives and made no impression on my patient in spite of my free use of them. When he came to examine the patient, he immediately suggested with his black cohosh he would be able to relieve the patient. I had no confidence in his advice, but we gave it. I was much gratified to find that his prepared remedy relieved the patient, while the drug store drugs had failed.

As Dr. Thibault suggests, the chemical and laboratory prepared drugs are so much more convenient than going to the trouble of preparing herb and root drugs ourselves. For this reason I have never resorted to the economic procedure, but now that we are confronted with war conditions, it may become necessary in the face of this hardship to prepare the drugs as Dr. Clegg's paper suggests.

I am glad, indeed, to add my experience to the valuable paper, which experience thoroughly convinced me of the value of drug plants prepared for medicinal use and it is interesting to me to know that we have such a variety in our State.

Dr. D. C. Walt (Little Rock): This paper is a very good one, bringing out the facts that different plants, exert different influences on different animals even of the same general kind. Plants are also influenced differently by different conditions under which they grow, showing conclusively that the physio-chemical law that controls life, operates by conditions instead of individuals, pointing positively to the fact as we are able to realize the different values that go in to make conditions, just that much more positively can we control the expression. Twenty-five years ago, I was surprised at the results negroes got in syphilis—afterwards was able to get the same influence that evidently was a help in its general management with bullnettle that grows in nearly every field in this country. I also remember two negroes. They were brothers. One died under my care—the other went under the care of a "hoodoo" negro doctor. I am satisfied he would have died had I continued to treat him in a very short while. Inside of three months he was plowing in the field. Regardless of my effort to induce them to have the negro give me his values, allowing him to set his own price in money, I failed to get it. Tubercular Bacilli was in evidence in large numbers in each of these cases, the physical findings were positive.

Dr. W. C. Dunaway (Little Rock): When Dr. Clegg was reading that paper and enumerating the many vegetable plants growing in Arkansas, my mind was carried forcibly back (and I will not say how many years ago), when my mother used to gather Jerusalem oak that he mentions, and the boneset, and dosed us when we had the chills and fever and when we were troubled with worms. I suspect we had hookworm in those days; but she didn't recognize any worms except long worms. And, the vivid remem-

brance of the Jerusalem oak, the boneset, turpentine, the vegetable pill and the castor oil will ever linger with me. The fact is that we are going to have to go back to first principles if war conditions continue in the world; and I imagine they are going back and force us down to very many crude and primitive conditions. I believe that the doctor's paper is very timely.

Dr. Clegg, in response: I have nothing further to offer. I am very thankful for the liberal attention that has been paid to the paper, and the discussion that has been given it.

VACCINATION.*

By G. A. Warren, M. D.,
Black Rock.

This is a subject about which very little is said in the text-books of Medicine or Surgery, and while it has been in use for more than one hundred years, yet there has, for the most part, in this country at least, been very little improvement or advancement made since Jenner's discovery, 1798. One year, or one and a half years, after the discovery it was introduced in America and for sixty years thereafter it was done by getting the virus or serum from the arm of a recently vaccinated person and giving it to as many other persons as would come for vaccination. A few cases of syphilis were communicated by this process and the human serum was discontinued and that from a heifer was used instead and it was about this time that the custom of preparing vaccine on ivory points was begun; and a quarter of a century after, in glass tubes of glycerine. Antisepsis or asepsis was not practiced or known till the last quarter of the Nineteenth century, and it was nearly a hundred years after Jenner's discovery before the principle of immunizing was taken up and extended to other specific diseases, the first of which was probably antitoxin of diphtheria, which was begun in the last decade of the Nineteenth century, just one hundred years after vaccination was begun; it was then several years before any immunization for other diseases was begun and not until the last decade or since 1910 has it been extended very materially and we hope and believe that the dawn of immunizing has just begun. I look forward to the time when there will be an immunity for every specific disease from a common cold to tuberculosis. The only hope I see for a permanent protection of the great white plague is immunization and not cure. This may be a dream but I expect to live to see the day when even tuberculosis will be prevented by immunization. The majority of the medical profession may not be practicing immunization for the many diseases that have been worked out and proven good, but I take it that it is the duty of every up-to-date physician to accept and try every immunizing agent or practice, that the scientific world has found to be even partially protective. Some ten years ago at a meeting of the Arkansas Medical Society, held in Hot Springs, I read a paper on Serum Therapy, and I predicted that within the next few years we should be curing and preventing all diseases of a specific nature, by giving a specific cure or immunity for that disease. This prediction has, to a great extent, been verified. We now have a scientific immunity against many of the specific contagious or infectious disease, such as La Grippe, Pneumonia, Scarlet Fever, Typhoid Fever and even Gonorrhea and Syphilis, together with others.

Coming back to my subject of vaccination or vaccine, I have made some observation that I hope will be of some value to some of my colleagues in the profession. I contend that to have an immunity established in any individual there must be a reaction which is usually attended with fever, inflammation, etc., or we must have within us, either naturally or artificially, enough of the immunizing principle to combat and destroy the germs of infection or contagion that we may pick up in any and all methods known to the profession or that may be hereafter discovered. In the case of vaccination we have a local inflammation and afterwards a characteristic scar, which I contend may be minimized by putting the vaccine in the arm, back, leg or wherever the party may wish it, in several places instead of one, I prefer five or six places, and we get as good a reaction and have smaller sores that heal more quickly and rarely if ever cause a necrosis and slough of the tissues at the seat of inoculation. When we scarify a place as large as a quarter, the inflammation may cause a necrosis whether there be a mixed infection or not, of course there is always a mixed infection during the process of decay and slough, but it is not necessary to have a primarily mixed infection to produce a necrosis. If the individual has no immunity against the disease he must have a greater reaction than the person who has by heredity or acquirement a partial immunity and to pro-

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

duce this reaction there must be a local inflammation, which if scattered or divided into several places instead of one, we have the same reaction and protection with smaller sores, which more quickly heal and rarely if ever produce necrosis.

As to using antiseptics to prepare the field of inoculation, I prefer alcohol or iodine, followed by alcohol, and in either case followed by sterile water. I never dress with an antiseptic, but use bismuth as a dusting powder and plain gauze. I have discontinued the use of the vaccine shields as I believe them to do harm rather than good. I have made tests as to the immunity of persons previously vaccinated and I doubt the scar being any criterion to tell us when to re-vaccinated. Persons may be immune for sixty years with only a small scar and a person may lose his immunity in ten years with a typical scar, or even with a history of a previous attack of "small pox." I have known of two second cases of "small pox" during the past five years, so they were persons who needed vaccination. Yet we find few, if any, persons who have had "small pox" that will submit to vaccination. I can see no reason for this, as vaccination correctly done gives little or no pain and if the party is immune there will be no sore and if there is no immunity the subject needs revaccinating.

DISCUSSION.

Dr. J. K. Smith (Texarkana): There is one thing I might have misunderstood. I didn't understand that having small pox makes you immune to vaccination. Did you intend to convey that idea?

Dr. Warren: Yes.

Dr. Smith: There's two separate diseases, as I understand it: One is cow-pox, and the other is chicken-pox. If you have small pox you are just as liable to have vaccina afterwards, as if you didn't have it. I see no use of revaccinating after the patient had small pox.

Dr. J. F. Rowland (Hot Springs): With reference to the latter part of the essay, I would like to give my experience in Mt. Pleasant, Tenn., about fifteen years ago. Being a non-graduate, and having secured a license from the State of Tennessee, I went down to Mt. Pleasant to practice during the vacation. There were about ten or fifteen thousand miners at work, most of them were negroes, and many of them were convicts. Small pox broke out in the town, and the Board of Health appointed me Health Officer. We established compulsory vaccination, and if a miner refused vaccination he was forced to submit at the point of a gun, by a deputy sheriff. We had about five hundred cases of small pox, and I never saw a case of small pox during that time—and some of the cases were very virulent, because we lost many of them—that developed where there was a good vaccination, that is, a good scar; nothing other than varioloid. That proved to my mind very conclusively that we should vaccinate. I think it would be absurd for any one—I don't care who it is—doctor or layman—to object to vaccination, if done in an asceptic way as suggested by the essayist.

A CASE OF FOREIGN BODY IN THE LARYNX.

By R. B. Moore, M. D.,
Little Rock.

Bertha C., aged seven, was referred July 6, 1917, with the following history:

Three weeks previously, when holding an open safety-pin between her teeth, she had cold water dashed on her, causing sudden inspiration with asperation of the safety-pin.

According to the statement of the father, there was no paroxysm of coughing nor embarrassed respirations immediately following the accident. The child had no pain, no difficulty in breathing, talking nor swallowing, but was conscious of a foreign body in the throat.

Hoarseness, the first symptom, appeared two weeks later. About the same time labored breathing was noticed during sleep. Both progressively became worse, but there was no marked dyspnoea at the time I saw the child one week from the onset of symptoms. She still complained of no pain nor even dysphagia. She had no cough. Her appetite was good and bowels regular. She played as usual and apparently suffered no discomfort.

A radiograph showed the safety-pin lodged in the lower part of the larynx in its antero-posterior diameter.

Under a general anaesthetic a small Jackson's Laryngeal speculum was engaged on the posterior surface of the epiglottis and the larynx elevated. The head of the pin could be seen against the posterior wall just below the true vocal cords. The point was embed-

ded in the ericoid cartilage. There was marked swelling of both ventricular bands with hypereamia of the entire larynx.

The shaft of the pin near its embedded point was grasped with a Mosher's alligator forceps and dislodged by pushing downward. The pin was then withdrawn by sliding it along the posterior wall of the larynx through the rima glottidis.

The patient was kept in bed under observation and given a soft diet for two days. She had no subsequent dysphagia and her temperature, pulse and respiration were normal. The hoarseness entirely disappeared at the end of two weeks.

AMPUTATION OF AN ARM WITH A RAZOR AND A HAND SAW.*

By M. S. Alexander, M. D.,
Wirt, Okla.

When I received an invitation to read a paper from our editor, I was, needless to say, awe-stricken, wondering "By whence he came" to ask of me, an insignificant, country doctor, to write upon any subject that would prove of interest to such a gathering of the disciples of Esculapius. So I wrote that I had amputated an arm with a razor and a common hand saw, furnished me by the unfortunate victim himself.

He replied that it is just such things that occur in the practice of our country doctors that our medical society wants and no textbook sermons. As a result, I desire to read you a paper on the amputation of an arm with a razor and a hand saw, even though I may impose on the good nature of so distinguished an assemblage.

Gentlemen, you who practice in the cities have your hospitals. You have at your elbow's end your consultants, you have your retinue of trained help, likewise your illumination as well as your water supply and your paved streets. We, in the country, have none of these, and I say to you gentlemen without fear of being successfully contradicted, that in my humble opinion every doctor who practices his profession in the rural communities of this great commonwealth is of necessity a specialist, yea, even a dentist..

But this desideratum is not amputating an arm with a razor and a hand saw.

I was called out one day in the "stieks" to do a curettage for a lady, who had been badly handled by one of the "Wise ladies" of the neighborhood. Hence, I went prepared to do this particular operation, but not prepared to do an amputation. While at this good lady's home a courier came for me to go three miles distant into the jungles to see a man, Ed Pullen by name, who was in the employ of our Circuit Court Clerk, who had accidently shot his arm with a double-barreled shotgun.

I examined the wound and found that the humerus was literally shattered from two inches below the shoulder joint; so I advised him that the only thing that I possibly could do for him was an amputation; but I was unfortunate in that I had no instruments with me whereby I could do this work successfully in the jungles.

I advised that he allow me to take him to the hospital at Jonesboro, Ark., where I could give him every care as well as to a place where I could do the work sueeessfully.

He replied by saying that he had no means by which to go to a hospital, not even railroad fare. I replied by stating that I would furnish railroad transportation as well as hospital facilities without expense to him. At this juncture he became semi-angered and said, "Well, if you are much of a doctor, I have a razor and a hand saw and it strikes me that any fool could cut a man's arm off."

Gentlemen, I must have been the fool—for his arm came off! He put it up to me and as you well know "necessity is the mother of invention." It is needless for me, gentlemen, to tell you that I needed an operating table; two empty flour barrels and a door from the shack furnished the same. I needed a sterilizer; a galvanized wash tub in the yard with a good red hot fire under the same is as good a sterilizer as anybody ever needs. Your pathogenic bacteria cannot resist its alluring influences very long after it gets to doing business. Into my improvised sterilizer I placed two sheets removed from the bunk of the shack, they were used for bandages. The razor and hand saw, furnished by the unfortunate victim himself, a spool of No. 8 thread and two hat pins taken from a woman's hat, a milk crock to wash my hands in was the complete armamentarium. When everything was in readiness I placed my unfortunate patient on the improvised operating table. I had chloroform with me; I gave it to him until he was completely anesthetized, when I then gave

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

it to an intelligent lady to continue its administration under my supervision.

I improvised a torniquet from the strips of the sheets which I had boiled in the wash tub. I introdueed just below the joint two eight or ten ineh ladies' hat pins and made a figure of eight with my strips of sheeting to aet as a tourniquet; so you see, gentlemen, I had a bloodless operation.

I then took the razor that was furnished me (and it was no safety at that) and made a eireular ineision three and a half inehes below the joint approximately, to see how mueh tissue was destroyed and how much I eould save. I then made an ineision with the razor on both sides of the arm proper, eonserving as mueh musele as I possibly eould, using a eommon needle to grasp the blood vessels with, amputating just two inehes from below the joint. I used a No. 8 plain eotton thread to tie all blood vessels as well as for the skin sutures. The noise that the old saw made in sawing through the bone, rasping and grating still produees a "Tinnitus Aurum" to me.

Having biehloride of mereury with me I improvised a drip in this way; I took a one-gallon empty lard bueket. In the bottom I made an opening with an eight-penny nail and plaeing a small pieee of eotton in it, so as to foree it to deliver a drop of the solution every minute, using a 1 to 5,000 solution, the bucket being suspended from a rafter in the house, or rather shaek.

The following morning, I being afraid that the "good people" in the "woods" would lyneh me, for cutting a man's arm off with a razor and a hand saw and likewise fearing an infeetion, I sent my wife (who by the way I have trained as my assistant in the operating room), to dress Mr. Pullen's arm, the naked truth being that I was afraid to go. I awaited her home-eoming with great anxiety, she having gone nine miles in the jungles to dress this man's arm, and when she returned she stated to me, "Daddy, the work is that of an artist." I leaped with eestasy and my eup of joy was full and overflowing. There was at no time any infeetion nor any fever and within two weeks the man resumed his oeeupation as a teamster.

After this man's eomplete reeovery he moved to Harrisburg, Ark., where he was engaged in elearing land, he selling the wood thereon to the town inhabitants. I presented him with a bill for $40.00, eommensurate with his ability to pay, I having expended $14.00 in going to see him for livery hire out in the "stieks."

I gave the bill to the Hon. Benj. Harris, of the Harrisburg, Ark., bar, requesting that he give the said Pullen a reeeipt in full payment for $40.00 if he would deliver to any poor white woman in the eity of Harrisburg one load of stove wood. Needless, gentlemen, for me to tell you that up to this day the load of wood has failed of delivery.

In eonclusion, the lesson taught me in this ease is this; if things are not clean, make them clean; then go ahead, and sueeess will erown your efforts.

DISCUSSION.

Dr. T. F. Kittrell (Texarkana): I know I could not have done half as well as he did. I don't think any of us could have. And he got such a result, under such circumstances, and had been so thorough in his asepsis under those circumstances, I think it shows he is a mighty good man.

Dr. W. C. Dunaway (Little Rock): I think the essayist has shut us off from discussion, as he has covered the subject so thoroughly. I didn't hear all of the paper; but I imagine I can understand the contents from the beginning. I heard the latter part and I must say it is one of the most interesting papers I ever heard in a medical convention. It just shows us that we frequently look at a mole hill and consider it a mountain, and I have received a good deal of instruction and inspiration from the few latter remarks in the doctor's paper.

Dr. Alexander: I thank the gentlemen who have discussed the paper for their kind commendation of my skill and to the management for allowing me this opportunity of telling what little I knew.

THE BIBLE AND THE DOCTORS.

The book of Chronieles is rather severe on the doetors. It says:

"And Asa, in the thirty and ninth year of his reign, was diseased in his feet, until his disease was exeeeding great; yet in his disease he sought not to the Lord, but to the physieians. And Asa slept with his fathers."

In Eeelesiastes, on the contrary, is a more encouraging opinion:

"Honor the physieian for the need thou hast of him; for the Most High hath created him. The skill of the physieian shall lift up his head and in the sight of great men he shall be praised. The Most High hath created medieines out of the earth and a wise man shall not abhor them."

Then, however, eomes another blow:

"He that sinneth before his maker shall fall into the hands of his physieian."—*Harper's Weekly.*

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

NEXT MEETING OF THE STATE SOCIETY, JONESBORO, MAY, 1917.

Editorials.

ANNUAL LIST OF MEMBERS.

The list of members of the Arkansas Medical Society, as reported by the various county societies whose membership constitute the State soeiety, is published in this issue of the Journal. This list shows the official registration list. The value of having your name on this list is far greater than you may think.

Copies of the Journal are sent to the leading medical publieations all over the country; also to insurance eompanies, the offices of large manufacturing enterprises, and the large libraries at New York, Chieago, Philadelphia, Denver and San Francisco. An insuranee eompany wishes to appoint an examining physieian in new territory, for instance. Some one on that list will be seleeted. It may be you. Company physicians are frequently in demand. Appointments are most likely to be made from sueh an official list, beeause membership in any State Medieal Society is a eertificate of reliability and character.

We regret to say that the list is not as large as it should be and as it could be were the proper effort made to induee non-members to join our Society. It is up to the County Seeretaries and Counеilors to solieit new members who are at once eligible and desirable.

MEDICAL STUDENTS AND DRAFT STATUS.

It is gratifying to note that the authorities have at last modified the draft regulations so as to allow medical students who have studied for a year or more, also hospital internes to continue their studies. The reason given is that the government realizes that, confronted with possibly two years or more of war the services of these embryo doctors will be sorely needed. Medieal students are not shirkers nor slackers. But the aim of the War Department has been to utilize the services of all men drafted in such direction as their occupations before the war will make them the most valuable, and certainly the services of the medieal students and internes of hospitals will be of far greater value in the hospital and ambulance service than as mere food for powder. It would be folly to waste their knowledge and experience in the field now when there will be such heavy demands for medical skill later on.

PROTECT THE PHYSICIAN AT THE FRONT.

When the United States declared war on Germany and there was a call for physicians and surgeons to join the Medical Reserve Corps, the Journal suggested that some action be taken to protect those who, leaving their practice, responded to the call. It is plainly a duty to protect such self-sacrificing members of the profession and see that their families are provided for and their practice held for them, so far as is possible. We cannot all go to the front; the home folks need medical attention also. But we can "do our bit" just as many laymen all over the United States, who are not subject to service from age or disability, who are joining the home guards and helping in various ways to bear their share of the burden.

It might be arranged that doctors who stay at home take care of the practice of the absentees at the front. It is not expected that they forego all their fees; but they could in many cases keep the practice for the patriotic physician at the front, so he can resume it on his return. It is learned that some of the county societies have taken up this important matter and even adopted resolutions; but resolutions count for little unless backed up by practical work. And, as far as has been reported, actual work along this line has been neglected.

Thus far Arkansas has furnished only one-third of her quota of physicians, so that many more will have to go. Is it not our duty to act in this matter under discussion before they go? Applications for the Medical Reserve Corps may be had on request to the editor of this Journal.

In this connection it is pertinent to add to those intending to go that the Journal will be forwarded to them if they will send to this office their military address.

It will be absolutely necessary to state details, giving division, regiment and company. The Journal will be sent on request to the various cantonments or camps, as well as abroad.

The following are the names of Arkansas physicians commissioned September 1st in the Medical Reserve Corps and the Arkansas National Guard.

Is your name there?

If not, when?

THE PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

(The Journal will publish each month the names of those who have enlisted during the preceding month.)

Arthur Ceberry Haney, Atkins, 1st Lieut.
William Elvage McLain, 108 E. 3d St., Argenta, 1st Lieut.
Wheeler Scott McCall, Barfield, 1st Lieut.
William Franklin Ball, Batesville, 1st Lieut.
Charles Garland Hinkle, Batesville, 1st Lieut.
Hugh LaFayette Rains, Bay, 1st Lieut.
Kenneth Bowles Huffman, Bentonville, 1st Lieut.
Urey Guess Davis, Blytheville, 1st Lieut.
Rufus Francis Parks, Bonanza, 1st Lieut.
Forrest Pitt Baker, Booneville, 1st Lieut.
Deggett Sylvester, Bradford, 1st Lieut.
William Franklin Akin, Branch, 1st Lieut.
Raphael William Steele, Cave Springs, 1st Lieut.
Matt Francis Houston, Clarendon, 1st Lieut.
Philip Emerson Thomas, Clarendon, 1st Lieut.
Howell William Brewer, Clarksville, 1st Lieut.
James Fletcher Poe, Clinton, 1st Lieut.
Grover Cleveland Bruce, Dalark, 1st Lieut.
Henry Edwin Morrison, Dixon, 1st Lieut.
Morgan Clint Berry, Donaldson, 1st Lieut.
Alphonso Isom, Dumas, 1st Lieut.
Horace William Graves, Elm Springs, 1st Lieut.
James Emory Phillips, Eureka Springs, 1st Lieut.
Harry H. Towler, Fayetteville, 1st Lieut.
David Oliver Bridgforth, Forrest City, 1st Lieut.
John M. Hewitt, Argenta P. O., Ft. Logan H. Roots, 1st Lieut.
Davis Woolf Goldstein, Fort Smith, 1st Lieut.
Edgar Lee Lindsey, Fort Smith, 1st Lieut.
Constant Perkins Wilson, Jr., 40th and Park Ave., Fort Smith, 1st Lieut.
William Bruce Center, Garland, 1st Lieut
Frank Carroll Maguire, Gregory, 1st Lieut.
James William Butts, Helena, 1st Lieut.
Aris Wellington Cox, Solomon Bldg., Helena, 1st Lieut.
William Robert Orr, Helena, 1st Lieut.
Shelby Arthur Turner, Heber Springs, 1st Lieut.
Paul Edward Johnson, Holly Grove, 1st Lieut.
Victor Kirkpatrick Allen, Hope, 1st Lieut.
Robert Ellis Weaver, Hope, 1st Lieut.
Frederick Earl Diemer, Dugan Stuart Bldg., Hot Springs, 1st Lieut.
Alfred G. Farmer, Hot Springs, 1st Lieut.
William Kate Smith, Hot Springs, 1st Lieut.
Loyd Thompson, A. & N. Gen. Hospital, Hot Springs, 1st Lieut.
Thomas Debbins, Humphrey, 1st Lieut.
Luther Mace Lile, 203½ Main St., Jonesboro, 1st Lieut.
John R. Brinkley, Judsonia, 1st Lieut.
Wylie Robert Felts, Judsonia, 1st Lieut.
Samuel George Boyce, 522 N. Palm Street, Little Rock, 1st Lieut.
William Allaire Dashiell, 2715 Gaines St., Little Rock, 1st Lieut.
Robert Manley Eubanks, 315 Bankers Trust Bldg., Little Rock, 1st Lieut.
James Vincent Falisi, Boyle Bldg., Little Rock, 1st Lieut.
George Beard Fletcher, 1109 West 6th St., Little Rock, 1st Lieut.
Thomas Micajah Fly, 113 E. 5th St., Little Rock, 1st Lieut.
Seabron Jennings Fuller, 405 Boyle Bldg., Little Rock, 1st Lieut.
Dewell Gann, Jr., 224 Bankers Trust Bldg., Little Rock, 1st Lieut.
Roscoe Conklin Kory, 1008 Cumberland Street, Little Rock, 1st Lieut.

Guy Arnold McCormack, 6 Urquhart Bldg., Little Rock, 1st Lieut.
Pat Murphy, 820 Center St., Little Rock, 1st Lieut.
Mahlon Dickerson Ogden, Bankers Trust Bldg., Little Rock, Captain.
Lee Vallette Parmley, 504 Rector St., Little Rock, 1st Lieut.
Ernest Whitfield Prothro, New Capital Hotel, Little Rock, 1st Lieut.
Wallace Dickinson Rose, 620 W. 3rd St., Little Rock, 1st Lieut.
Scott Clark Runnels, 900 Scott St., Little Rock, Captain.
Milton Vaughan, Health Commissioner, Little Rock, Captain.
Francis Vinsonhaler, Urquhart Bldg., Little Rock, Captain.
James Fleming Musser, Lockesburg, 1st Lieut.
Mark Webster Rye, London, 1st Lieut.
Arch Sylvester Chapman, Mammoth Spring, 1st Lieut.
Issac Stirman Butler, Marshall, 1st Lieut.
John J. Jones, box 149, Marshall, captain.
Ira Wall Ellis, Monette, 1st Lieut.
Edward Ralph Cotham, Monticello, 1st Lieut.
William Joplin Sheddan, Oseeola, 1st Lieut.
Iverson Howard Jewell, Paris, Captain.
John Short Jenkins, 403 Citizens Bank Bldg., Pine Bluff, 1st Lieut.
James Ennis Parramore, Prairie Grove, 1st Lieut.
Thomas Wilson, Proctor, 1st Lieut.
Fred Somervell Watson, Rosboro, 1st Lieut.
John Bridger Wells, Scott, 1st Lieut.
Everett Newton Lipe, Scranton, 1st Lieut.
William Hibbetts, Texarkana, 1st Lieut.
John A. Lightfoot, Texarkana, 1st Lieut.
William Kimbal Read, Texarkana, 1st Lieut.
Floyd Webb, Turrell, 1st Lieut.
Ernest Leonard Posey, Van Buren, 1st Lieut.
Anthony Claudius Thiolliere, Varner, Captain.
George Washington Eubanks, Wabash, 1st Lieut.
George Maxey Watkins, Walnut Ridge, 1st Lieut.
Henry Watkins Allen Lee, West Helena, 1st Lieut.
Woodye Albert Winter, Widener, 1st Lieut.
Arley Doyne Cathey, Wilton, 1st Lieut.
William Jesse King, Braneh, 1st Lieut.
Hugh Cleveland Brooks, Casa, 1st Lieut.
Wylie Richard Holloway, Choetaw, 1st Lieut.
Loren Wallin, Dermott, 1st Lieut.
Velpeau Hill Ragsdale, Fitzhugh, 1st Lieut.
Sidney Jones Wolfermann, 1st Natl. Bk. Bldg., Fort Smith, 1st Lieut.
William Robert Haynie, Haynes, 1st Lieut.
John William Bush, Hot Springs, 1st Lieut.
Grayson Emery Takington, 500 Dugan-Stuart Bldg., Hot Springs, 1st Lieut.
Cincinnatus Hoine Miller Mason, Huffman, 1st Lieut.
Hugh Buren Henry, Hulbert, 1st Lieut.
Foster Jarrell, Huttig, 1st Lieut.
Floyd Clardy, 203½ Main St., Jonesboro, 1st Lieut.
James Wilson Ramsey, Jonesboro, 1st Lieut.
Edward Owens Day, 700½ Main St., Little Rock, 1st Lieut.
Wayne Neal Freemyer, 209½ West 2nd St., Little Rock, 1st Lieut.
Alexander Everett Harris, 321 Bankers Trust Bldg., Little Rock, 1st Lieut.
Shelby Boone Hinkle, Boyle Bldg., Little Rock, 1st Lieut.
Alvin Leonidas Jobe, 622½ Main St., Little Rock, 1st Lieut.
Dee C. Lee, State Hosp. for Nervous Diseases, Little Rock, 1st Lieut.
Arthur Lee Mobley, 620 Rock St., Little Rock, 1st Lieut.
Robert Booth Moore, 214 Southern Trust Bldg., Little Rock, 1st Lieut.
Nolie Mumey, City Hosp., Little Rock, 1st Lieut.
Nicholas William Riegler, 1206 Rock St., Little Rock, 1st Lieut.
William Anderson Snodgrass, 304 Donaghey Bldg., Little Rock, Captain.
Alvin Weil Strauss, 205 Boyle Bldg., Little Rock, 1st Lieut.
Geyer Chauncey Wood, 219 Rock St., Little Rock, 1st Lieut.
Mae McLendon, Marianna, 1st Lieut.
Guy Allen Brooks, Marvell, 1st Lieut.
Marshall Allen, O'Kean, 1st Lieut.
Wilbur Russell Harwell, Osceola, 1st Lieut.
William Breathwit, Pine Bluff, 1st Lieut.
John Trimble Palmer, Pine Bluff, 1st Lieut.
J. William Scales, 202½ Main St., Pine Bluff, Captain.
George Washington Antoine, Prescott, 1st Lieut.
Joseph Marion Clark, Purth, 1st Lieut.
James Fred Hays, Russellville, 1st Lieut.
Henry Pender Leonord, Seyppel, 1st Lieut.
Carl Wilton Lupo, Cotton Belt Hosp., Texarkana, 1st Lieut.
Arthur Franklin Hoge, Fort Smith, 1st Lieut.
Erton Edwin Poyner, Green Forest, 1st Lieut.
Henry McClure, Camp Pike, Little Rock, Captain.
Henry King Wade, Dugan-Stuart Bldg,. Hot Springs, 1st Lieut.

MEDICAL CORPS, A. N. G.

FIRST ARKANSAS INFANTRY.

William H. Abbington, Surgeon, Major, Beebe.
Walter H. Bruee, Ass't Sg., Capt., El Paso.
Otto Christian, Ass't Sg., 1st Lieut., Springdale.

SECOND ARKANSAS INFANTRY.

Glen M. Holmes, Major, Little Rock.
Austin R. Hederiek, Capt., Booneville.
Henry E. Mobley, 1st Lieut., Blue Mt.
Asa C. Watson, 1st Lieut., Little Rock.

THIRD ARKANSAS INFANTRY.

James R. Wayne, Major, Little Rock.
Hugh E. Longino, Capt., Magnolia.
Fay P. Washington, 1st Lieut., Little Rock.
Fred Bearden, 1st Lieut., Morrilton.

AMBULANCE COMPANY NO. 1.

Bernie F. Jungkind, Capt., Beebe.
Allen C. Prichard, 1st Lt., Hot Springs.
Sidney R. Crawford, 1st Lieut., Hot Springs.

FIRST ARKANSAS FIELD HOSPITAL.

Homer Scott, Major, Bauxite.
Perry V. Wagley, 1st Lt., Little Rock.
Robert H. Bryant, 1st Lieut., Bauxite.
Rector P. Sheets, 1st Lieut., Little Rock.
Nim L. Barker, 1st Lieut., Harrison.
Jerome Wright, 1st Lieut., Russellville.

DENTAL CORPS.

FIRST ARKANSAS INFANTRY.

Alexis F. Searle, 1st Lieut., Jonesboro.
Joe E. Bond, 1st Lieut., Warren.

SECOND ARKANSAS INFANTRY.

H. G. Spencer, 1st Lieut.. Sloam Springs.
Albert H. Howell, 1st Lieut., Little Rock.

THIRD ARKANSAS INFANTRY.

Fred W. Thomas, 1st Lieut., Clarkesville.
Theodore J. Richardson, 1st Lieut. Little Rock.

Abstracts.

ERYTHEMA.

H. A. Christian, Boston (*Journal A. M. A.*, Aug. 4, 1917), has chosen for his chairman's address before the Section on the Practice of Medicine of the A. M. A. at its last session, the subject already noticed by Osler, namely, the cases varying in symptoms, but which have a common feature in skin lesions of the erythema type in puzzling combination. They are the frequent cause of diagnostic errors and may lead to needless surgical operations. The skin lesions are protein in type. Osler, he says, deserves much credit for grouping these cases together. Synthesis of skin and visceral lesions into an entity in which various combinations of erythema, hemorrhage, edema and exudation occur, both in the skin surfaces and within the body, yields a better comprehension of the process with multiple subdivisions with different names according to the dominating symptoms. In recent years with frequent use of large amounts of foreign serums in therapeutics, serum sickness has become a well recognized syndrome. The condition in the group of cases here considered can be illustrated fairly well by cases which he reports in the address, and which he thinks can be best conceived as being due to some disturbance in the capillary system from unknown cause. The areas may be either on the skin, mucosa, serous surfaces, subcutaneous tissues, muscles, or viscera. The condition is usually recurrent and very different symptoms may appear in the same patient. The frequent arthritis has its analogy in that of serum sickness, and the diarrhea, colic, etc., is probably due to changes in the intestinal wall causing exudation or spasm. How far the renal lesions are to be considered an acute nephritis is difficult to say, but functional study has shown in several cases markedly impaired renal function. Five of Osler's twenty-nine reported patients died with what was considered uremia. He illustrates the difficulty of placing the renal lesions by a case in which a purpuric rash and edema were prominent skin symptoms. He is inclined to think, however, that in many patients hematuria, albuminuria and other renal disturbances occur as a part of the disease entity here considered and that the renal lesions are not truly those of nephritis. This will account for the lack of a progression into a true chronic nephritis. Christian concludes as follows: "There is a definite clinical entity in which with skin lesions of the erythema group (purpura, erythema, urticaria, angioneurotic edema) visceral lesions occur as the result of the same type of lesion. The most common of these visceral manifestations are arthritis, gastro-intestinal symptoms, hematuria and various disturbances of renal function. The visceral disturbances occur unaccompanied by the skin lesions. The symtomatology of the group is very complex, and without the presence of the skin lesions at a given time the cases present great difficulties in diagnosis."

SUDDEN DEAFNESS.

O. J. Stein, Chicago (*Journal A. M. A.*, Sept. 1, 1917), discusses the deafness that is profound and appears suddenly, leaving out the cases of deafness which are only slight or partial though occurring suddenly, and such cases where chronic deafness follows gradually from chronic changes in the hearing apparatus. The symptomatology in the patients stricken with sudden and profound deafness is often that of Meniere's syndrome. Malingering and hysteria may be considered but ordinarily will be dismissed. In traumatism the causative factor is so apparent as to rarely obscure the diagnosis and the same may be said of occupational causes. Toxic action of drugs or disease may occasionally be a cause but the greater number of cases are caused by systemic diseases like syphilis, the various anemias, leukemias, diabetes, arteriosclerosis, mumps, and some of the suppurative ear diseases. In the insane this type also sometimes occurs. The lesion may be located in the labyrinth, the eighth nerve or the cranial cavity, the labyrinth being perhaps the most frequent location. Of the constitutional causes the syphilitic cases are probably the most numerous and the deafness may be an early or late symptom. In many of the acute diseases, like influenza and pneumonia, the pathology has been recently attributed to toxic agents acting within the labyrinth. All of these cases assume an importance much beyond the average case of deafness and are sometimes underestimated by physicians. Prompt and vigorous measures in treatment may do much good and the auditory reeducation aids. When this cannot be done the new education in lip reading is the only resource.

DIVERTICULITIS OF THE LARGE INTESTINE.

After referring to a former article in which five cases of excision of the sigmoid for diverticulitis were described and which gave the first actual demonstration of the pathology, W. J. Mayo, Rochester, Minn., (Journal A. M. A., Sept. 8, 1817), reports the results of observations made in forty-two cases where portions of the large intestine were resected for this cause. The signs and symptoms closely resemble those of appendical inflammation excepting that in most instances the disorder was on the left side of the abdomen. It is highly probable, he thinks, that most of the reported cases of so-called sigmoiditis are examples of diverticulitis. He gives the weight of six of the patients, about two-thirds of whom were males and in many of whom increased deposits of fat in the abdomen had undoubtedly some influence in the development of the diverticula, especially if there had been a tendency to the formation of intestinal gases. The average duration was two years, the longest twelve, and the shortest seven days. In thirty-four of the forty-two patients a sensitive tumor was present in the left iliac fossa attended by localized peritonitis and often by intestinal obstruction. In two patients diverticula were found in the rectum. A diagnosis of inflammatory disease was made in twenty cases. The Roentgen rays showed obstruction, but in acute obstruction it did not differentiate from cancer though it usually did in chronic cases. Carcinoma was present in thirteen cases. Mayo divides the cases clinically into four groups. The first includes fleshy middle aged persons who present themselves with an acute sensitive tumefaction in the left iliac fossa which gradually disappears in a few days and is due to irritative effects of fecal concretions and other contents in the thin walled narrow necked sacs. There is a marked tendency to relapse, like that in appendicitis, but it does not always produce trouble as shown by the cases commonly observed in necropsies. Only in cases where the symptoms are serious, therefore, or the disease becomes chronic or relapsing, is operation needed. Group two are cases of diverticulitis and peridiverticulitis with absess formation resulting in enterovesical, enterocutaneous and other fistulas. The rule is that if an abscess forms it should be opened and drained but a serious attempt should not be made at the primary operation. They have had no fatal cases in their practice, which was to open the peritoneal cavity, dissect out the fistulous sacs and close the openings in the bladder and colon with chromic catgut. The immediate results were seldom satisfactory but a spontaneous closing of the secondary fistula that forms was generally obtained. In group three obstruction occurs, the result of infection and edema. The condition is practically identical with those of the previous group except for the existence of obstruction, the actual amount of which, however, was surprisingly small. A tumor was usually found and in 31 per cent. also malignant disease. The fourth group were cases with carcinoma developing on a diverticulum. Giffin found that for every sigmoid resected for diverticulitis, seven had been resected for carcinoma. The development of carcinoma in this region may progress lowly, but it is unwarranted to consider it primary when found. The close association of carcinoma with diverticulitis leads to the conclusion that when a tumor seeming to be diverticulitis but without acute symptoms is found in the sigmoid or color, and especially if it only partly subsides and then continues as a chronic mass causing symptoms carcinomatous disease should be suspected and resection done. Of forty-two patients with diverticulitis with and without cancer, fourteen died as the result of the operation. It must be taken into consideration that these patients were usually fat and operation was necessary during the stage of obstruction, infection, etc. It is of great value, therefore, to be able to differentiate between diverticulitis and cancer, as in the former so extensive removal of tissue is not necessary. Several interesting points as to the operation are given by the author.

VOICE IMPAIRMENT IN TONSILLECTOMY.

From study of the physiology and anatomy of the soft palate and tonsil based on 161 tonsillectomized throats and a study of thirty cases of voice or other disturbance resulting from tonsillectomy, ELMER L. KENYON, Chicago (*Journal A. M. A.*, Sept. 1, 1917), offers the following conclusions in substance: In view of all the facts he brings forth, the operation of tonsillectomy is in a serious situation as far as the medical public is concerned, unless by better technic or better skill the deformities it produces can be diminished. In removing the tonsillar capsule we take out an

important supportive structure on which the normal physiologic action of the soft palate largely depends. The uncertainty of operative complications leading to increased deformities is inevitable, and danger to the speaking voice is, in the nature of the operative conditions, inevitable in an unknown percentage of cases, while the danger to the singing voice begins long before that. Further intelligent efforts applied to technic and delicacy of procedure and possibility of greater care in lessening postoperative scar tissue are called for. Indiscriminate tonsillectomy on children or adults with singing voices of importance to their possessors is to take risks which the operator himself would not consent to take if appreciating the conditions. The weakness of the present professional attitude in favor of the exclusive employment of the extracapsulary operation lies in the fact that no evidence exists proving that an operation aiming at a clean, complete intracapsular lymphidectomy, that is, complete removal of lymphatic tissue within the capsule, might not prove as capable of eliminating infective dangers as the extracapsular operation. It would not only be free from serious deformity but also a less serious operative procedure. Kenyon pleads, therefore, for a thorough relatively conservative operation which would leave the tonsillar capsule undisturbed. If this idea meets professional favor the operator could make a rational choice between conservative and radical measures and an operation which could always be practically employed when operating on singers.

ACNE.

E. H Marsh recommends the following formulae for the treatment of acne:

℞ Potassii sulphide 4.00
Aquae 60.00
Or
℞ Zinci sulphatis 4.00
Aquae 60.00
Miscel et adde
Sulphuris praecip. 4.00
M. et ft. lotio.

This lotion may be replaced by the following ointment:

℞ Acidi salicylici 0.60
Resorcinolis 1.00
Sulphuris praecip. 1.30
Petrolati, q. s. ad 4.00

When scaling of the skin occurs this treatment should be discontinued and a mild ointment, such as ung. aq. rosae, applied.—*Medical Times.*

Personals and News Items.

Dr. Anderson Watkins has returned from Denver.

Dr. and Mrs. James Scarborough of Little Rock have returned from their vacation.

Dr. and Mrs. W. F. Smith of Little Rock have returned from Ludington, Mich.

Dr. and Mrs. E. N. Davis, Little Rock, have returned from an automobile trip through Northwest Arkansas and part of Missouri.

Dr. and Mrs. J. A. Burke of Madison visited in Little Rock and Hot Springs last month.

Dr. D. Christian of Springdale, visited his son, Lieut. O. Christian, at Camp Pike, last month.

The editor of this Journal will be glad to send you an application blank for a commission in the Medical Reserve Corps.

Lieut. B. V. Powell, M. R. C., of Camden, recently at Fort Riley, Kansas, has been assigned to Camp Pike, Regimental Detachment No. 6, Camp Infirmary No. 4.

Lieut. Loyd Thompson, M. R. C., Hot Springs, has returned from Fort Oglethorpe and has been assigned Director of Venereal Diseases, Camp Beauregard, Alexandria, La.

Major W. H. Abington of Beebe, Commanding Officer of the First Arkansas Infantry, Medical Corps, has gone to Alexandria, La., to report for duty at Camp Beauregard.

Physicians visiting in Little Rock during the past month include: Walter Eberle, Fort Smith; C. J. March, Fordyce; S. M. Graves, Mt. Levi; James A. Wigley, Mulberry; J. C. Rembert, Helena; L. E. Love, Dardanelle.

The Southern Medical Association will meet in Memphis, November 12-15, 1917. Special announcement pertaining to the meeting will be made in our October issue.

Capt. F. Vinsonhaler, M. R. C., of Little Rock, has been assigned to Camp Pike for active duty. The convenience of Camp Pike will enable Dr. Vinsonhaler to continue his practice as heretofore.

A report dated August 22, 1917, states that there has been 80 cases of typhoid fever in Paragould, Greene County, Ark., within the

preceding six weeks, and that from 3 to 5 cases daily were being notified.

In this issue will be found a new advertisement by The Maltbie Chemical Company, New York. They have solved the Creosote problem. Through their preparation Calcreose—creosote may be given in large doses without difficulty. Write them for samples and literature, mentioning this Journal.

The State Board of Health met in Little Rock Aug. 22, 1917. Members present: J. T. Clegg, Siloam Springs; C. F. Crosby, Heber Springs; H. L. Montgomery, Gravely; H. R. Webster, Texarkana; S. A. Southall, Lonoke; F. L. Mahoney, El Dorado; B. A. Fletcher, Augusta and C. W. Garrison, Little Rock.

The Fiftieth General Assembly of the State of Illinois passed a consolidation bill which became a law July 1, 1917. This bill, known as the Civil Administrative Code, created the Department of Public Health, abolished the State Board of Health, secretary and executive officer of the State Board of Health, and vested the power to enforce the State Board of Health Act in the Department of Public Health.

The American Medical Association through its propaganda department has issued a third edition of the pamphlet, "Medical Institutes." This interesting edition gives to the public the facts regarding the nostrum evil. The book describes the methods of advertising and how patients are snared in such places as the "Heidelberg Medical Institute," "United Doctors," "De Barthe Treatment for Rheumatism," Jas. E. Bruce, president, also president of the Neal Institute, "C. H. Carson and his Temple of Health," and other articles of disgraceful newspaper advertising quack doctors.

LITTLE PURE ZINC OXIDE ON THE MARKET.

Examinations made by the Bureau of Chemistry of the United States Department of Agriculture show that very little zinc oxide on the market in the United States complies with the standards of the U. S. Pharmacopoeia. Nearly all of the samples examined contained an excessive amount of lead. The samples were labeled "Not U. S. P.—Containing Small Quantities of Lead," and therefore complied with the Food and Drugs Act. The labels on the packages in most instances will probably come to the attention of the druggists, but not to the attention of physicians. The medical profession will therefore not be advised as to whether or not zinc oxide preparations are made from standard ingredients. Conditions may arise where a zinc oxide preparation contaminated with lead may do injury. A limited supply of U. S. P. zinc oxide is available and physicians may protect themselves and their patients from possibly injury by calling for such material on their prescription.

INFANTILE PARALYSIS GERM LOCATED.

A year ago research work was begun for the purpose of finding and isolating the germ of infantile paralysis, a fund having been established by Julius Mastbaum. It is announced now that the work has been successful to the extent of the isolation of the germ at the Jewish Hospital, Philadelphia. Drs. Meyer, Hollis, Cohen and Heist, and Prof. John A. Kolmer are credited with the achievement.

The germ was isolated four years ago by scientists of the Rockefeller Institute; but the method was so complicated that it could not be accurately established. The method of isolation now discovered is simple and will be announced later, it is promised. The presence of another germ found on paralysis victims was thought heretofore to be present only after death. In isolating it by the Philadelphia scientists it was demonstrated that it is present before death, but its exact status has not been determined.

Isolation of the germ, however, is only one step. The next is to discover a remedy which shall be effectual; but it is believed it will be found, as a sequel to the recent isolation. That, of course, remains to be proven and possibly it will be found only after laborious effort.

MORE THAN 13,900 OFFICERS NOW IN ARMY MEDICAL CORPS.

There are now more than 13,900 officers engaged in the work of the Medical Department of the Army, including Regular Army officers and the four Officers' Reserve Corps —Medical, Dental, Veterinary and Sanitary—connected with the work under the Surgeon General. It is estimated that at least 24,000 physicians will be included in the personnel of the department when full strength is reached.

Every step in caring for the physical welfare of the soldiers from the time they are

sworn into service until they are discharged comes under the Medical Department. In this work is included inspection of foods to be served soldiers, sanitation, care of the sick and wounded, the operation of field, base, and convalescent hospitals, "re-education" of the permanently crippled, handling the supplies for all this work, etc. The total number of hospital beds will be on a basis of 25 per cent of the strength of the Army.

The Medical Department of the Army deals only with the soldiers. The Red Cross looks after the civilian and noncombatant populations. Each operates alone in its field.—The Official Bulletin.

UNITED STATES CIVIL-SERVICE EXAMINATION—PATHOLOGIST (MALE) OCTOBER 3, 1917.

The United States Civil Service Commission announces an open competitive examination for pathologist, for men only, on October 3, 1917, at the places mentioned in the list printed hereon. A vacancy in Freedmen's Hospital, Washington, D. C., at $2,000 a year, and future vacancies requiring similar qualifications, at this or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer or promotion.

Applicants must show that they have had at least one year's experience in a pathological laboratory after graduating from a medical college of recognized standing, and that they are able to make all kinds of pathologic examinations and reports thereon.

Applicants must have reached their twentieth birthday on the date of the examination.

Applicants may be examined at any place at which this examination is held, regardless of their place of residence, and become eligible for appointment to Freedmen's Hospital and other branches of the nonapportioned service; but those desiring to become eligible for appointment in the apportioned service in Washington, D. C., must be examined in the State or Territory in which they reside and have been actually domiciled in such State or Territory for at least one year previous to the examination, and must have the county officer's certificate in the application form executed.

Applicants must submit to the examiner on the day of the examination their photographs, taken within two years, securely pasted in the space provided on the admission cards sent them after their applications are filed. Tintypes or proofs will not be accepted.

This examination is open to all male citizens of the United States who meet the requirements.

Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C. The exact title of the examination as given at the head of this announcement should be stated in the application form.

New and Nonofficial Remedies.

GASTRON: A solution of the gastric tissue juice obtained by direct extraction from the mucosa of the fresh stomach of the pig. It contains 25 per cent. by weight of glycerin, 0.25 per cent. absolute hydrochloric acid, and 1 Cc. is capable of dissolving 200 Gm. of coagulated egg albumin. Gastron is designed for use in disorders of gastric function. Fairchild Bros. and Foster, New York (Jour. A. M. A., August 25, 1917, p. 645).

NEODIARSENOL: Neodiarsenol has the composition, physical and chemical properties and action, uses and dosage as given for neosalvarsan in New and Nonofficial Remedies, 1917. Neodiarsenol is supplied in ampules containing, respectively, 0.15, 0.3, 0.45, 0.6, 0.75 and 0.9 Gm. neodiarsenol. Neodiarsenol is accepted for New and Nonofficial Remedies, as the available supply of neosalvarsan seems to be insufficient to meet the demand, and this preparation conforms to the rules of the Council. Neodiarsenol is made in Canada under a license issued by the Commissioner of Patents of Canada. The Farbwerke-Hoechst Company holds the sale of neodiarsenol in the United States an infringement of its rights, and has stated that all violations of its rights will be prosecuted. The Diarsenol Company, Limited, Toronto, Canada (Jour. A. M. A., August 4, 1917, p. 383).

Propaganda for Reform.

NASOPHARYNGEAL DISINFECTION BY HYPOCHLORITES: While the practical sterilization of infected wounds by means of hypochlorites has been effected, the sterilization of the nose and throat is far more difficult, especially in the case of diphtheria and meningococcus car-

riers. Encouraging results from the use of a hypochlorite substitute, dichloramine-T, have been reported, but these require confirmation. Jour. A. M. A., August 25, 1917, p. 651).

ADMINISTRATION OF AGAR: O. H. Brown and W. O. Sweek favor the administration of agar in the form of a hot lemonade, chocolate or bouillon. For the preparation of a lemonade they direct to take two heaping tablespoonfuls of the agar powder, flakes or sheds; add to one quart of water, and boil till the agar is thoroughly liquified; sweeten and add juice of one lemon; then drink the entire quart while hot. They suggest that the quart of hot agar lemonade may be prepared in the morning, poured into a vacuum bottle, and taken leisurely during the day. They find that patients prefer to make use of orange, grapefruit, vanilla, maple or other flavoring in place of the lemon. (Jour. A. M. A., August 11, 1917, p. 467).

SOME MISCELLANEOUS NOSTRUMS: Newspapers advertise Swift's Sure Specific for the treatment of "rheumatism" and "impure blood." The advertising matter sent out by its promoters recommends "S.. S. S." for the self-treatment of syphilis. No information is offered in regard to the composition of "S. S. S." except that it contains 15 per cent. alcohol and the claim that it is "made from purely vegetable ingredients." Kaufmann's Sulphur Bitters are claimed to contain sulphur, gentian, wild cherry, aloes, eupatorium, "Tanacetum," balmony, podophyllum, "Senna Indica," calamus. It was sold as a remedy for scrofula, catarrh, salt rheum, rheumatism, etc., but the government declared these curative claims false and fraudulent. (Jour. A. M. A., August 25, 1917, p. 663).

STANDARDIZATION OF SERUMS AND VACCINES: The misunderstandings and difficulties as regards the standardization of serums and vaccines are pointed out by G. W. McCoy, Director of the U. S. Hygienic Laboratory. So far legal standards have been formulated only for diphtheria and tetanus antitoxin. A tentative standard for antityphoid vaccine has been devised. This completes the list of standardized biologic products. Though not standardizable, vaccine virus and antirabic virus are tested for potency in the process of manufacture. McCoy reviews the work which has been done in the attempt to work out and standardize other biologic products, and brings out the many difficulties which are in the way (Jour. A. M. A., August 4, 1917, p. 378).

TREATMENT WITH VACCINES: The conditions—self-limited infections and chronic infectious processes—in which vaccine treatment has been employed make it exceedingly difficult to determine if vaccines are of value. As pointed out by J. P. Leake of the U. S. Public Health Service, whenever the use of vaccines in a certain disease has been carefully controlled, its use has been found of little value. This is true of whooping cough, typhoid fever and gonorrheal vulvovaginitis and probably in pyorrhea alveolaris. As for the strikingly favorable results in individual instances which are reported by vaccine enthusiasts and repeated in advertisements, these may all be matched by equally brilliant results in cases not treated with vaccines. (Jour. A. M. A., August 25, 1917, p. 648).

BILE, A CHOLAGOGUE: The view that bile absorbed from the alimentary tract increases the secretion of bile, and thus acts as a true cholagogue, seems to be established. The feeding of fresh bile to bile fistula dogs causes an almost constant cholagogue action. The bile of the dog, sheep and pig all have this effect, and ox bile seems to be the most active cholagogue. Of the bile constituents, glycocholic acid has a moderate cholagogue effect, but usually causes a great drop in bile pigment output in a bile fistula dog; taurocholic acid has a strong cholagogue action, but little inhibiting effect on bile pigment secretion; the bile fat has no influence on bile flow, but causes inhibition of bile pigment secretion; cholic acid has little effect on bile flow, but may decrease the bile pigment output (Jour. A. M. A., August 4, 1917, p. 386).

TRIMETHOL. The Council on Pharmacy and Chemistry concludes that the claims for Trimethol are unsupported by acceptable evidence, and has declared Trimethol and the pharmaceutical preparations said to contain it—Trimethol Syrup, Trimethol Capsules and Trimethol Tablets—sold by Thos. Leeming & Co., New York, ineligible for New and Nonofficial Remedies. The Trimethol preparations are advertised for use in all conditions dependent on intestinal putrefaction, and some of the advertising claims give to "Trimethol" the scope of a panacea. A request for Trimethol having been refused by the manufacturers, the Council's bacteriologist examined one of the pharmaceutical preparations said to con-

tain it. Although the preparation was found to be a germicide, the examination did not indicate that Trimethol had any remarkable potency or other properties suggesting that it possessed special therapeutic value. (Jour. A. M. A., August 11, 1917, p. 485)..

Iodine Ointments: An examination of iodine ointments made in the A. M. A. Chemical Laboratory by L. E. Warren, demonstrated that when made according to the method of the U. S. Pharmacopoeia (dissolving iodine in potassium iodide and glycerine and then incorporating with benzoinated lard), about 20 per cent, of the free iodine used combines with the ointment base. On standing for a month a further quantity of 5 per cent, goes into combination, and after this no further loss of iodine occurs. The composition of iodine ointment, U. S. P., after a month or more is approximately: Free iodine, 3 per cent.; iodine combined with fat, 1 per cent.; potassium iodide, 4 per cent.; benzoinated lard (containing combined iodine), 80 per cent. The U. S. Pharmacopoeia requirement that iodine ointment shall be freshly prepared appears to be unnecessary. It was also found that if iodine ointment is made without the addition of potassium iodide, practically all of the free iodine enters into combination with the fat (Am. Jour. Pharm., August, 1917, p. 339).

Serum Treatment of Pneumonia: Rufus Cole reports that one-third of the cases of pneumonia are due to Type I pneumococci, one-third to Type II. pneumococci, from 10 to 15 per cent. to Type III. and the remainder to pneumococci belonging to the fourth group. The mortality from infection with Type I. and Type II. are of average severity with a mortality of from 25 to 30 per cent.; those from Type III. are severe and more than one-half of the patients die from this infection, while the mortality from Group IV. is only about 10 to 15 per cent. Anti-pneumococcic serum is efficient only in infection from Type I., and Cole has come to the conclusion that the serum should be administered only after it has been determined that the infection is due to this type. He reports that certain commercial serums have been found inefficient or without effect against Type I. infection. He also reports his experience with commercial serums which were inefficient or inert. It is expected that the U. S. Public Health Service will soon establish a method for the standardization of antipneumococcic serum. (Jour. A. M. A., August 18, 1917, p. 505).

Some Miscellaneous Nostrums: Limestone Phosphate is devoid of limestone. It is a mixture of sodium bicarbonate and sodium acid phosphate, which, when dissolved in water, yields the ordinary sodium phosphate. Parmint, according to the advertising, should be used for the treatment of catarrhal deafness, head noises, catarrh of the stomach, catarrh of the bowels, loss of smell, lung trouble, asthma, bronchitis, etc. Parmint appears to be an alcoholic solution containing sugar, glycerin, a small amount of chloroform and a mixture of volatile oils with oil of anise predominating. Varnesis is a "rheumatism cure" which, when analyzed some time ago, was found to contain less than 1 per cent. vegetable extractives chiefly derived from emodin-yielding drugs and capsicum. Taken according to directions, its user consumes as much alcohol as he would obtain from the consumption of a half-pint of raw whiskey every four and one half days. Fruitatives is sold under a meaningless statement of composition and with claims that suggest it to be a cure for paralysis, consumption, rheumatism, etc. It is probable that Fruitatives possesses no virtues not found in aloin, belladonna and strychnine pills. (Jour. A. M. A., August 18, 1917, p. 582)..

One way to make yourself a good doctor is never to give a drug unless you know just what you expect it to do.

The more closely men study drug action and apply drugs with definite reason, the more they tend to the use of remedies singly.—*Exchange.*

ACUTE NASAL CATARRH.

Sajour has found the following to act efficiently in the beginning of this condition:

Ammonii chloridi, gr. xl 2.6 gm.
Tr. opii, m xxx 2.0 c.c.
Sacch. albi, ʒj 4.0 gm.
Aquae camphorae, f℥j 30.0 c.c.

M. S.—One teaspoonful in water every hour or two.—Hughes' Practice of Medicine.

—*Journal Medical Society of New Jersey.*

ANNUAL LIST OF MEMBERS ARKANSAS MEDICAL SOCIETY.

(Notify Dr. C. P. Meriwether, Secretary, Little Rock, if errors in Names and Addresses are discovered.)

Arkansas County.

Bunn, A. D. ..... Humphrey
Fowler, Arthur ..... Humphrey
John, M. C. ..... Stuttgart
Hill, B. L. ..... Stuttgart
Moorhead, W. H. ..... Stuttgart
Morphew, L. H. ..... Stuttgart
Sillin, C. W. ..... Stuttgart
Swindler, E. B. ..... Stuttgart
Lowe, A. M. ..... Gillett
Lowe, W. W. ..... Gillett
Park, C. E. ..... De Witt
Whitehead, R. H. ..... Tichnor

Ashley County.

Cone, A. E. ..... Portland
Cockersham, H. E. ..... Portland
Sherrer, Fred M. ..... Portland
Mathews, W. M. ..... Crossett
Sparks, J. E. ..... Crossett
Setzler, G. H. ..... Crossett
Vines, C. L. ..... Crossett
Hawkins, M. C. ..... Parkdale
Williams, R. G. ..... Parkdale
Barnes, L. C. ..... Hamburg
George, B. F. ..... Hamburg
Norman, W. S. ..... Hamburg
Simpson, J. W. ..... Hamburg
Simpson, J. C. ..... Hamburg
McGehee, E. C. ..... Boydelle
Riley, J. D. ..... Montrose
Shipman, W. H. ... Bartlesville, Okla.
Wood, J. T. ..... Fountain Hill

Baxter County.

Elton, A. M. ..... Yellville
Morrow, J. J. ..... Cotter
Hipp, J. A. ..... Buford
Tipton, W. C. ..... Mountain Home
Tipton, J. T. ..... Mountain Home

Benton County.

Buffington, G. H. ..... Decatur
Eubanks, F. G. ..... Decatur
Cargile, Chas. H. ..... Bentonville
Henry, J. T. ..... Bentonville
Hurley, C. E. ..... Bentonville
*Hurley, Thos. W. ..... Bentonville
Huffman, K. B. ..... Bentonville
Lindsey, J. H. ..... Bentonville
Moody, W. C. ..... Bentonville
Pickens, W. A. ..... Bentonville
Beard, J. H. ..... Siloam Springs
Clegg, J. T. ..... Siloam Springs
Duckworth, F. M. ..... Siloam Springs
Smiley, J. L. ..... Siloam Springs
McHenry, W. A. ..... Rogers
McKelvey, A. A. ..... Rogers
Moore, W. A. ..... Rogers
Perkins, C. F. ..... Rogers
Pickens, E. E. ..... Rogers
Rice, R. S. ..... Rogers
Rice, C. A. ..... Rogers
Hodges, T. E. ..... Cane Hill
Ramsey, T. C. ..... Gentry
Wilson, C. S. ..... Gentry
Clemmer, J. L. ..... Springtown
Harrison, A. J. ..... Lowell
Horton, C. W. ..... Hiwassa
Highfill, E. J. ..... Cave Springs
Hughes, G. A. ..... Gravette
Hodges, Guy ..... Garfield
Mackoy, Frank W. ... Milwaukee, Wis.
Powell, J. T. ..... Maysville
Rice, T. M. ..... Avoca
Steele, R. W. ..... Cave Springs

Boone County.

Barker, N. L. ..... Harrison
Blackwood, J. C. ..... Harrison
Evans, D. E. ..... Harrison
Fowler, J. H. ..... Harrison
Johnson, J. J. ..... Harrison
Kirby, F. B. ..... Harrison
Kirby, L. ..... Harrison
Routh, Chas. M. ..... Harrison
Sims, J. L. ..... Harrison
Albright, Sam ..... West Point
Baines, Swartz ..... Bergman
Barham, J. H. ..... Zinc
Bolinger, John ..... Lead Hill
Butt, W. A. ..... Omaha
Gladden, Jos. J. ..... Western Grove
McCurry, D. K. ..... Alpena Pass
Poyner, Wm. H. ..... Gaither
Routh, H. L. ..... Batavia

Bradley County.

Barnett, S. H. ..... Warren
Fike, W. T. ..... Warren
Green, B. H. ..... Warren
Hartsell, W. L. ..... Warren
Martin, C. N. ..... Warren
Martin, R. ..... Warren
Wilson, Geo. ..... Hermitage
Wommack, W. E. ..... Hermitage
Crow, M. T. ..... Ingall's
Jackson, D. A. ..... Vick

Calhoun County.

Black, C. T. ..... Thornton
Rhine, T. E. ..... Thornton
Jones, E. T. ..... Hampton
Wilson, D. F. ..... Hampton

Carroll County.

Floyd, R. G. ..... Eureka Springs
Huntington, R. H. ..... Eureka Springs
John, J. F. ..... Eureka Springs
Phillips, J. E. ..... Eureka Springs
Pace, Henry ..... Eureka Springs
George, Chas. A. ..... Berryville
Poyner, I. M. ..... Berryville
Harvey, W. A. ..... Berryville
Donaldson, C. W. ..... Green Forest
Morrow, F. R. ..... Green Forest
Poynor, E. E. ..... Greeu Forest
Poynor, J. W. ..... Osage
Reynolds, J. R. ..... Grand View
Sisco, C. P. ..... Osage

Chicot County.

Craig, W. A. ..... Eudora
Douglass, S. W. ..... Eudora
Henry, R. N. ..... Lake Village
McGehee, E. P. ..... Lake Village
Norton, M. M. ..... Lake Village
Barlow, E. E. ..... Dermott
Baker, E. ..... Dermott
Blanks, J. T. ..... Dermott
Ringgold, G. W. ..... Dermott
Curtis, J. F. ..... Jennie
Easterling, W. W. ..... Chicot
Clark, B. C. ..... Sunny Side
Rigdon, F. E. ..... Reedland

Clay County.

Latimer, N. J. ..... Corning
Nelson, F. L. ..... Corning
Simpson, A. R. ..... Corning
Newkirk, C. H. ..... Datto
Richardson, M. C. ..... Datto
Cunning, I. H. ..... Knobel
Hughey, M. C. ..... Rector
Hiller, J. P. ..... Pollard
Lunt, J. P. ..... Leonard
Lynch, Richard ..... Success
Smith, J. E. ..... Reyno
Stewart, O. R. ..... Palatke
Waddle, M. V. B. ..... Success

Clark County.

Daly, J. M. ..... Arkadelphia
Doane, S. A. ..... Arkadelphia
Moore, W. M. ..... Arkadelphia
Rowland, W. T. ..... Arkadelphia
Townsend, N. R. ..... Arkadelphia
Wallis, J. C. ..... Arkadelphia
Wozencraft, L. C. ..... Friendship
Kirby, D. E. ..... Gurdon
McLain, C. H. ..... Gurdon
McLain, John ..... Gurdon
May, C. B. ..... Gurdon

Cleveland County.

Bell, J. F. ..... Rison
Hamilton, A. J. ..... Rison
Sadler, H. D. ..... Rison
Wilson, H. O. ..... Rison
Carter, J. D. ..... New Edinburgh
Leoli, Chas. ..... Kingsland
Routh, Junius ..... New Edinburgh

Columbia County.

Baker, J. J. ..... Magnolia
Longino, H. A. ..... Magnolia
Longino, Hugh ..... Magnolia
Smith, P. M. ..... Magnolia
Stevens, C. D. ..... Magnolia
Twitty, Walter ..... Emerson
Vaughn, J. T. ..... Emerson
Walker, J. C. ..... Emerson
Sanders, G. P. ..... Stephens
Cooksie, W. P. ..... Atlanta

Conway County.

Bradley, A. R. ..... Morrilton
Bearden, Fred ..... Morrilton
Logan, B. C. ..... Morrilton
Goatcher, A. L. ..... Plumerville
Halbrook, J. ..... Center Ridge
Jackson, J. H. ..... Center Ridge

Craighead County.

Altmau, J. T. ..... Jonesboro
Clardy, F. ..... Jonesboro
Hale, C. S. ..... Jonesboro
Haltom, W. C. ..... Jonesboro
Jackson, W. W. ..... Jonesboro
Lutterloh, C. M. ..... Jonesboro
Lutterloh, P. W. ..... Jonesboro
Pallett, E. M. ..... Jonesboro
Rains, H. L. ..... Jonesboro
Ramsey, J. W. ..... Jonesboro
Ratcliff, R. W. ..... Jonesboro
Stroud, H. A. ..... Jonesboro
McAdams, H. H. ..... Jonesboro
Willett, R. H. ..... Jonesboro
Bates, A. C. ..... Lake City
Crawford, John E. ..... Bay
Grady, N. H. ..... Monett
Harrison, B. L. ..... Truman
Howell, J. C. ..... Nettleton
Nesbith, Frank ..... Brookland
Robinson, A. E. ..... Leachville
Simpson, W. S. ..... Bono
Walker, B. F. ..... Nettleton
Waddell, G. ..... Lunsford

Crawford County.

Blakemore, J. E. ..... Van Buren
Bourlaud, O. M. ..... Van Buren
Dibrell, M. S. ..... Van Buren
Kirkland, Sam'l D. ..... Van Buren
Lucas, Giles ..... Van Buren
Parchman, W. L. ..... Van Buren
Posey, Ernest L. ..... Van Buren
Mitchell, J. H. ..... Uniontown
Wigley, J. A. ..... Mulberry

Crittenden County.

Hicks, W. P. ..... Earle
Mathews, J. H. ..... Earle
Mauney, S. M. ..... Earle
Hare, T. S. ..... Crawfordsville
Blue, W. R. ..... Parkin
McVay, L. C. ..... Marion
Parker, A. C. ..... Clarksdale
Stevenson, S. M. ..... Crawfordsville
Webb, Floyd ..... Turrell
Reed, F. M. ..... Turrell

Dallas County.

Atkinson, H. H. ..... Fordyce
Harrison, F. E. ..... Fordyce
Hope, O. W. ..... Fordyce
March, C. J. ..... Fordyce
Kelly, M. D. ..... Carthage
Thornton, J. D. ..... Willow
Cheatham, H. A. ..... Princeton
Wozencraft, W. L. ..... Holly Springs
Smith, J. Y. ..... Sparkman
Taylor, Marvin ..... Sparkman

Desha County.

MacCammon, Vernon ... Arkansas City
Francis, J. W. ..... Arkansas City
Smith, C. P. ..... Arkansas City
Furbish, L. P. ..... McGehee
DeClark, W. H. ..... McGehee
Smith, H. T. ..... McGehee
White, R. F. ..... McGehee

*Deceased.

Chears, J. T. ..... Tillar
Chears, D. T. ..... Tillar
Fletcher, G. W. ..... Tillar
Stanley, A. C. ..... Tillar
Isom, A. ..... Dumas
Biscoe, Gibbs ..... Pendleton

Drew County.

Collins, A. S. J. ..... Monticello
Corrigan, M. B. ..... Monticello
Cotham, E. R. ..... Monticello
Gates, S. M. ..... Monticello
Kimbro, S. O. ..... Monticello
Duckworth, F. L. ..... Monticello
Pope, M. Y. ..... Monticello
Butler, E. N. ..... Wilmar
Castile, H. ..... Winchester
Erwin, E. D. ..... Winchester
Lisnbee, A. M. ..... Collins
Smith, R. N. ..... Collins
Wilson, J. S. ..... Plantersville

Faulkner County.

Brown, Geo. S. ..... Conway
Cureton, H. E. ..... Conway
Brannon, E. O. ..... Conway
Dickerson, C. H. ..... Conway
Greeson, W. R. ..... Conway
Huddleston, G. D. ..... Conway
McCollum, I. N. ..... Conway
McMahan, J. E. ..... Conway
Muse, J. M. ..... Conway
West, W. J. ..... Conway
Westerfield, J. S. ..... Conway
Munn, J. B. ..... Vilonia
Downs, J. H. ..... Vilonia
Henderson, G. L. ..... Greenbrier

Franklin County.

Blackburn, S. W. ..... Ozark
Douglass, Thos. ..... Ozark
Warren, G. D. ..... Ozark
Williams, H. F. ..... Ozark
Akin, W. F. ..... Brauch
Hodges, E. F. ..... Branch
King, W. J. ..... Branch
Blakely, T. B. ..... Coal Hill
Porter, W. C. ..... Coal Hill
Powell, J. M. ..... Coal Hill
Blakely, J. P. ..... Alix
Benefield, C. E. ..... Charleston
Crocker, J. T. ..... Lonelm
Downey, R. L. ..... Cecil
Gibbons, W. H. ..... Webb City
Harrod, J. C. ..... Denning
Jones, W. E. ..... Magazine
Post, J. L. ..... Altus
Wear, W. M. ..... Paris

Grant County.

Kelly, O. R. ..... Sheridan
Butler, J. L. ..... Sheridan
Jones, J. E. ..... Sheridan
Shaw, J. B. ..... Sheridan
Caple, C. B. ..... Grape Vine

Greene County.

Baker, E. S. ..... Paragould
Bridges, G. P. ..... Paragould
Castleberry, F. L. ..... Paragould
Dickson, H. N. ..... Paragould
Dickson, P. L. ..... Paragould
Hutchins, W. P. ..... Paragould
Ellington, Edgar ..... Paragould
Ellington, W. E. ..... Paragould
Haley, R. J. ..... Paragould
Hopkins, G. T. ..... Paragould
Hardesty, C. A. ..... Paragould
McKenzie, J. G. ..... Paragould
Owens, W. R. ..... Paragould
Scott, F. M. ..... Paragould
Wilson, Olive ..... Paragould
Wood, J. F. ..... Paragould
Tynor, H. V. ..... Paragould
Majors, W. W. ..... Walcott
Bradsher, R. E. ..... Marmaduke
Cohn, Geo. ..... St. Francis
Cothren, Thad ..... Jonesboro
Graham, M. C. ..... Gainsville
Lamb, Jones ..... Beech Grove

Hempstead County.

Cannon, G. E. ..... Hope
Carrigan, P. B. ..... Hope
Farrow, W. D. ..... Hope
Gillispie, L. J. ..... Hope
Kelly John L. ..... Hope
Russell, M. V. ..... Hope
Smith, Don ..... Hope
Saner, W. F. ..... Hope
Weaver, J. H. ..... Hope
Weaver, R. E. ..... Hope
Autry, J. B. ..... Columbus
B Shers, H. L. ..... Texarkana
Garner, T. J. ..... Washington
McKinney, Z. H. ..... Fulton
Hayes, R. E. ..... Fulton

Hot Spring County.

Bramlitt, E. T. ..... Malvern
Hodges, W. G. ..... Malvern
McCray, E. H. ..... Malvern
Phillips, R. Y. ..... Malvern
Williams, J. M. ..... Malvern
Cox, J. A. ..... Donaldson
Hardy, H. ..... Social Hill
Smith, J. H. ..... Magnet

Garland County.

Biggs, Orvis ..... Hot Springs
Bush, J. W. ..... Hot Springs
Burton, O. H. ..... Hot Springs
Cassada, B. F. ..... Hot Springs
Connell, W. H. ..... Hot Springs
Chesuutt, Jas. H. ..... Hot Springs
Collings, H. P. ..... Hot Springs
Cook, A. H. ..... Hot Springs
Dake, C. ..... Hot Springs
Dake, W. ..... Denver, Colo.
Deaderick, W. H. ..... Hot Springs
Davis, R. G. ..... Hot Springs
DeWoody, L. C. ..... Hot Springs
Drennen, C. Travis ..... Hot Springs
Drennen, D. Edward ..... Hot Springs
Ellsworth, E. H. ..... Hot Springs
Ellis, L. R. ..... Hot Springs
Forbes, W. O. ..... Hot Springs
Gray, D. A. ..... Hot Springs
Garnett, A. S. ..... Hot Springs
Hallman, V. H. ..... Hot Springs
Hebert, G. A. ..... Hot Springs
Henderson, W. B. ..... Hot Springs
Holland, T. E. ..... Hot Springs
Horner, J. S. ..... Hot Springs
Holland, E. D. ..... Hot Springs
Jelks, F. W. ..... Hot Springs
Jelks, J. T. ..... Hot Springs
King, O. H. ..... Hot Springs
Laws, W. V. ..... Hot Springs
Lautman, M. ..... Hot Springs
Martin, E. H. ..... Hot Springs
Mobs, D. ..... Hot Springs
Mount, M. F. ..... Hot Springs
McConnell, C. A. ..... Hot Springs
McClendon, J. W. ..... Hot Springs
Purdum, E. A. ..... Hot Springs
Proctor, J. M. ..... Hot Springs
Rowland, J. F. ..... Hot Springs
Rowland, H. ..... Hot Springs
Sanders, T. E. ..... Hot Springs
Short, Z. N. ..... Hot Springs
Snyder, W. L. ..... Hot Springs
Steele, S. B. ..... Hot Springs
Smith, J. W. ..... Hot Springs
Smith, W. K. ..... Hot Springs
Strachan, J. B. ..... Hot Springs
Strachan, H. M. ..... Hot Springs
Thompson, Loyd ..... Hot Springs
Thompson, M. G. ..... Hot Springs
Tribble, A. H. ..... Hot Springs
Thompson, E. L. ..... Hot Springs
Vaughan, P. T. ..... Hot Springs
Williams, A. U. ..... Hot Springs
Winegar, E. F. ..... Hot Springs
Williams, F. M. ..... Hot Springs
Weil, S. D. ..... Hot Springs
Wood, J. S. ..... Hot Springs
Wootton, W. T. ..... Hot Springs

Howard County.

Alford, T. A. ..... Murfreesboro
Roberts, J. L. ..... Murfreesboro
Dildy, E. V. ..... Nashville
Gibson, W. M. ..... Nashville
Hale, A. W. ..... Nashville
Hopkins, J. S. ..... Nashville
Hutchinson, D. A. ..... Nashville
Toland, W. H. ..... Nashville
Holt, J. M. ..... Tokio

Independence County.

Ball, W. F. ..... Batesville
Case, J. W. ..... Batesville
Craig, Stark ..... Batesville
Dorr, R. C. ..... Batesville
Gray, F. A. ..... Batesville
Hinkle, C. G. ..... Batesville
Johnson, O. J. T. ..... Batesville
Kennerley, J. H. ..... Batesville
Lawrence, W. B. ..... Batesville
Blakeley, M. M. ..... Newark
Evans, A. A. ..... Newark
Moore, W. P. ..... Newark
Pascoe, V. L. ..... Newark
Rodman, T. N. ..... Newark
Roe, J. B. ..... Newark
Long, W. J. ..... Sulphur Rock
Robertson, S. N. ..... Sulphur Rock
Baldwin, W. S. ..... Melbourne
Drennen, S. A. ..... Rush
Bone, O. L. ..... Cushman
Evans, L. T. ..... Mt. Pleasant
Gray, E. M. ..... Floral
Heyden, J. ..... Bethesda
Jeffery, Paul ..... Bethesda
McAdams, V. D. ..... Cord
Smith, H. H. ..... Calico Rock
Wyatt, W. A. ..... Rosie
Wood, T. J. ..... Evening Shade

Jackson County.

Best, A. L. ..... Newport
Erwin, I. H. ..... Newport
Gray, C. R. ..... Newport
Joues, O. E. ..... Newport
Stephens, G. K. ..... Newport
Walker, H. O. ..... Newport
Watson, E. L ..... Newport
Willis, L. E. ..... Newport
Graham, J. S. ..... Tuckerman
Ivy, J B. ..... Tuckerman
Jamison, O. A. ..... Tuckerman
Kimberlin, K. K. ..... Tuckerman
Slaydon, L. T. ..... Tuckerman
Boyd, F. M. ..... Little Rock
Causey, G. A. ..... Swifton
George C. E. ..... Grubbs
Wilson, W. F. ..... Elmo

Jefferson County.

Breathwit, Wm. ..... Pine Bluff
Blankenship, W. H. ..... Pine Bluff
Caruthers, C. K., Jr. ..... Pine Bluff
Crump, J. F. ..... Pine Bluff
Gill, J. F. ..... Pine Bluff
Glover, C. A. ..... Pine Bluff
John, J W. ..... Pine Bluff
Jordan, A. C. ..... Pine Bluff
Jenkins, J. S. ..... Pine Bluff
Lemons, J. M. ..... Pine Bluff
Liberman, J. F. ..... Pine Bluff
McMullen, E. C. ..... Pine Bluff
Luck, B. D. ..... Pine Bluff
Palmer, J. T. ..... Pine Bluff
Pittman, W. G. ..... Pine Bluff
Rowell, F. C. ..... Piue Bluff
Lowe, W T. ..... Pine Bluff
Scales, J. W. ..... Pine Bluff
Spylliards, J. S. ..... Pine Bluff
Thompson, A. G. ..... Pine Bluff
Troupe, A. W. ..... Pnie Bluff
Williams, Harry, Jr. ..... Pine Bluff
Withers, J. W. ..... Pine Bluff
Woodul, T. W. ..... Pine Bluff
Shelton, M A. ..... Wabbaseka
Wood, R. P. ..... Altheimer

Johnson County.

Barger, M. I. ..... Lamar
Burgess, M. E. ..... Lamar
Burgess, T. E. ..... Lamar
Bradley, John F. ..... Lamar
Gray, L. C. ..... Clarksville
Hunt, E. H. ..... Clarksville
Hunt, Wm R. ..... Clarksville
Kolb, J. S. ..... Clarksville
Manly, Robt. N. ..... Clarksville
Boyer, H. L. ..... Hartman
Graves, S. M. ..... Mt Levi
Hardgrave, G. L. ..... Hartman
Love, John G. ..... Hartman
Ogilvie, J. W. ..... Harmony

Lafayette County.

Baker, F. E. ..... Stamps
Hoover, A. S. ..... Stamps
Hill, C. H. ..... McKamie
McKnight, J. F. ..... Walnut Hill
Youmans, F. W. ..... Lewisville

Lawrence County

Hatcher, Wright ..... Imboden
Henderson, A. G. ..... Imboden
Land, J. C. ..... Walnut Ridge
Hughes, J. C. ..... Walnut Ridge
McCarroll, H. R. ..... Walnut Ridge
Neece, T. C. ..... Walnut Ridge
Swindle, J. C. ..... Walnut Ridge
Townsend, C. C. ..... Walnut Ridge
Watkins, G. M. ..... Walnut Ridge
Smith, F. D. ..... Alicia

Fonder, E. T. ..... Little Rock
Ball, C. C. ..... Ravendon
Guthrie, T. C. ..... Jessup
Johnson, Wm. ..... Hardy
Morris, J. W. ..... Black Rock
Robinson, W. J. ..... Portia
Stephens, J. M. ..... Minturn
Stidham, J. H. ..... Hoxie
Thomas, Earl ..... Hoxie
Warren, G. A. ..... Black Rock

Lee County.

Bean, W. B. ..... Marianna
Bogart, H. D. ..... Marianna
Longley, W. W. ..... Marianna
Wall, E. D. ..... Marianna
Williamson, O. L. ..... Marianna
Beaty, W. S. ..... Vineyard
Bradford, W. S. ..... Haynes
Chaffin, C. W. ..... Moro
Foster, G. F. ..... La Grange
Haynie, Wm. R. ..... Haynes
Russwurm, S. C. ..... La Grange
White, Harry ..... Rondo

Little River County.

Marr, S. C. ..... Ashdown
Phillips, P. H. ..... Ashdown
Ringgold, J. W. ..... Ashdown
York, W. W. ..... Ashdown
Mitchell, J. B. ..... Foreman
Shirey, W. L. ..... Foreman
Stevens, D. L. ..... Foreman
Vaughan, W. E. ..... Richmond

Lincoln County.

McClain, J. K. ..... Star City
Tarver, B. F. ..... Star City
Clark, J. M. ..... Furth
Colquitt, S. W. ..... Cummins
Dixon, Chas. W. ..... Douglass
McClendon, J. M. ..... Gould
Thiolliere, A. C. ..... Varner
Watt, J. D. ..... Tyro

Logan County.

Armstrong, N. E. ..... Booneville
Baker, F. P. ..... Booneville
Hornsby, W. W. ..... Booneville
Hederick, A. R. ..... Booneville
McConnell, S. P. ..... Booneville
Stewart, John ..... Booneville
Bennett, W. H. ..... Paris
Foster, M. E. ..... Paris
Smith, J. J. ..... Paris
Smith, A. M. ..... Paris
Thompson, Holman ..... Paris
Harkins, R. A. ..... Ratcliff
Lipe, E. N. ..... Scranton
Scott, Earl E. ..... Magazine
Thompson, E. C. ..... Speilerville

Lonoke County.

Abbott, C. C. ..... England
Beaty, S. S. ..... England
Butler, O. C. ..... England
Chenault, J. C. ..... England
England, John F. ..... England
Harris, E. H. ..... England
Murchison, A. J. ..... England
Ward, O. D. ..... England
Benton, T. E. ..... Lonoke
Corn, F. A. ..... Lonoke
Cunning, Jno. R. ..... Lonoke
Mobley, A. L. ..... Lonoke
Southall, S. A. ..... Lonoke
Street, H. N. ..... Lonoke
Brewer, John F. ..... Kerr
Calahan, A. E. ..... Carlisle
Campbell, W. A. ..... Lexa
Elliott, J. E. ..... Carlisle
Crowgey W. B. ..... Scott
Fly, T. M. ..... Little Rock
Granberry, G. W. ..... Cahot
Niven, Jos. D. ..... Tucker
Thibault, H. ..... Scott
White, Luther ..... Coy
Wills, J. B. ..... Scott

Madison County.

Roberts, D. C. ..... Huntsville
Youngblood, F. ..... Huntsville
Callen, C. B. ..... Hindsville
Callen, L. H. ..... Hindsville
Acree, W. E. ..... Marble
Boomer F. A. ..... Kingston
Potts, J. H. ..... Spring Valley

Miller County.

Beck, E. L. ..... Texarkana
Buchanan, E. B. ..... Texarkana
Collam, S. A. ..... Texarkana
Dale, J. R. ..... Texarkana
Dale, J. R., Jr. ..... Texarkana
Dale, Rodney ..... Texarkana
Dixon, B. E. ..... Texarkana
Fuller, Earl ..... Texarkana
Grant, R. L. ..... Texarkana
Hibbitts, Wm. ..... Texarkana
Hunt, Preston ..... Texarkana
Kelly, K. M. ..... Texarkana
Kittrell, T. F. ..... Texarkana
Kosminsky, L. J. ..... Texarkana
Lennard, F. M. ..... Texarkana
Lanier, L. H. ..... Texarkana
Lightfoot, J. A. ..... Texarkana
Lee, A. G. ..... Texarkana
Mann, R. H. T. ..... Texarkana
Middleton, B. C. ..... Texarkana
Montgomery, S. K. ..... Texarkana
Smith, J. K. ..... Texarkana
Smiley, H. H. ..... Texarkana
Webster, H. R. ..... Texarkana
White, J. N. ..... Texarkana
Benton, J. B. ..... Stamps
Baggett, E. A. ..... Womble
Center, W. B. ..... Garland
Cook, J. C. ..... Garland

Mississippi County.

Dunavant, H. C. ..... Osceola
Harwell, C. M. ..... Osceola
Howton, O. ..... Osceola
Harwell, H. R. ..... Osceola
Prewitt, R. C. ..... Osceola
Sheddon, Wm. J. ..... Osceola
Crawford, H. F. ..... Wilson
Craig, E. E. ..... Wilson
Johnson, I. R. ..... Blytheville
Sanders, J. F. ..... Blytheville
Stevens, C. C. ..... Blytheville
Turrentine, A. E. ..... Blytheville
Usrey, M. O. ..... Blytheville
Hudson, F. F. ..... Luxora
Lowry, S. A. ..... Luxora
Campbell, J. H. ..... Joiner
Hamner, J. H. ..... Marie
Hill, E. V. ..... Yarbro

Monroe County.

Gilbrich, A. H. ..... Clarendon
Murphy, N. E. ..... Clarendon
Thomas, P. E. ..... Clarendon
Thomas, P. E., Jr. ..... Clarendon
Murphy, F. T. ..... Brinkley
McKnight, E. D. ..... Brinkley
Stout, T. J. ..... Brinkley
Johnson, P. E. ..... Holly Grove
Sylar, T. B. ..... Holly Grove
Bradley, W. T. ..... Monroe
Terry, P. D. ..... Blackton
Miller, J. C. ..... Blackton

Nevada County.

Buchanan, A. S. ..... Prescott
Buchanan, G. A. ..... Prescott
Cox, J. E. ..... Prescott
Chastain, J. S. ..... Prescott
Gee, S. B. ..... Prescott
Hesterly, J. B. ..... Prescott
Hesterly, S. J. ..... Prescott
Readee, A. A. ..... Prescott
Sandlin, J. T. ..... Emmet

Ouachita County.

Davison, A. ..... Camden
Early, C. S. ..... Camden
Rinehart, J. S. ..... Camden
Word, N. S. ..... Camden
Purifoy, W. A. ..... Chidester
Rushing, J. L. ..... Chidester
Byrd, E. J. ..... Millville
Henry, H. H. ..... Eagle Mills
Mahan, J. M. ..... Bearden
Powell, B. A. ..... Camp Pike
Simmons, W. H. ..... Fordyce
Thompson, J. S. ..... Stephens

Phillips County.

Altman, C. G. ..... Helena
Butts, J. W. ..... Helena
Cox, A. W. ..... Helena
Cox, A. E. ..... Helena
Ellis, J. B. ..... Helena
Fink, M. ..... Helena
King, W. C. ..... Helena
Henry, M. ..... Helena
Nichols, J. W. ..... Helena
Orr, W. R. ..... Helena
Rembert, J. C. ..... Helena
Rightor, H. H. ..... Helena
Russworm, W. C. ..... Helena
Trotter, C. H. ..... Helena
Bean, J. W. ..... Marvell
Bruce, W. B. ..... Marvell
Thompson, H. M. ..... Marvell
Brown, E. P. ..... Lexa
Eubanks, G. W. ..... Wabash
Kultgen, Edward ..... Elaine
Hall, L. ..... Turner
Holtzclaw, J. F. ..... Poplar Grove
Lee, K. W. A. ..... West Helena
Owens, M. W. ..... Oneida
Parker, Ollie ..... Elaine

Polk County.

Dunman, G. P. ..... Mena
Fletcher, T. M. ..... Mena
Hawkins, Ben H. ..... Mena
Hilton, J. G. ..... Mena
Watkins, P. R. ..... Mena
Vandiver, W. C. ..... Mena
Connelly, D. W. ..... Hatfield
Davis, J. R. ..... Fort Smith
Lee, F. A. ..... Vandervoort

Poinsett County.

Alexander, M. S. ..... Wirt, Okla.
Davis, J. C. ..... Little Rock
Verser, W. W. ..... Harrisburg
Yarbrough, R. E. ..... Harrisburg

Pope County.

Berryman, L. D. ..... Russellville
Campbell, J. M. ..... Russellville
Drummond, R. M. ..... Russellville
Hays, J. F. ..... Russellville
Linzy, J. R. ..... Russellville
Powell, J. W. ..... Russellville
Wright, Jerome ..... Russellville
Haney, A. C. ..... Atkins
Montgomery, W. A. ..... Atkins
McCarley, Tom ..... Appleton
Ross, C. J. ..... Gumlog
Rye, A. W. ..... London
Snider, S. M. ..... Moreland

Prairie County.

Ellis, C. S. ..... Hazen
Porter, T. G. ..... Hazen
Lynn, J. R. ..... Hazen
Hipolite, F. A. ..... DeVall's Bluff
Hipolite, W. W. ..... DeVall's Bluff
Parker, James ..... DeVall's Bluff
Gilliman, J. G. ..... Des Arc

Perry County.

Howard, M. E. ..... Perryville
Jones, R.A. ..... Houston
Reiff, W. L. ..... Perryville

Pulaski County.

Howell, A. R. ..... Argenta
Prothro, H. ..... Argenta
McKinney, A. T. ..... Argenta
Arkebauer, C. A. ..... Little Rock
Bailey, W. E. ..... Little Rock
Bathurst, Wm. R. ..... Little Rock
Bentley, C. E. ..... Little Rock
Bond, S. P. ..... Little Rock
Browning, H. W. ..... Little Rock
Caldwell, R. ..... Little Rock
Carmichael, A. L. ..... Little Rock
Cates, Thos. H. ..... Little Rock
Chesnutt, C. R. ..... Little Rock
Day, E. O. ..... Little Rock
Daly, M. G. ..... Little Rock
Darnall, R. F. ..... Little Rock
Dashiell, Wm. A. ..... Little Rock
Davis, E. N. ..... Little Rock
Dibrell, J. L. ..... Little Rock
Doyne, C. R. ..... Little Rock
Dooley, J. B. ..... Little Rock
Dunaway, W. C. ..... Little Rock
Eubanks, R. M. ..... Little Rock
Fletcher, Geo. B. ..... Little Rock
Flinn, B. W. ..... Little Rock
French, F. L. ..... Little Rock
Freemeyer, W. N. ..... Little Rock
Garrison, C. W. ..... Little Rock

Gibson, L. P. ..... Little Rock
Gray, Oscar ..... Little Rock
Hankinson, O. C. ..... Pine Bluff
Hardeman, D. R. ..... Little Rock
Harris, A. E. ..... Little Rock
Hinkle, S. B. ..... Little Rock
Holman, J. E. T. ..... Little Rock
Hodges, E. E. ..... Little Rock
Hudson, E. M. ..... Little Rock
Hughes, W. R. ..... Little Rock
Jobe, A. L. ..... Little Rock
Johnston, E. E. ..... Little Rock
Judd, O. K. ..... Little Rock
Kirby, H. H. ..... Little Rock
Kory, R. C. ..... Little Rock
Lamb, W. A. ..... Little Rock
Lenow, Jas. H. ..... Little Rock
McCaskill, M. E. ..... Little Rock
McCormick, A. G. ..... Little Rock
McCurry, W. T. ..... Little Rock
McGill, A. G. ..... Little Rock
McRae, W. M. ..... Little Rock
Manglesdorf, W. F. ..... Little Rock
May, W. S. ..... Little Rock
Meek, E. ..... Little Rock
Meriwether, C. P. ..... Little Rock
Miller, W. H. ..... Little Rock
Maxwell, R. L. ..... Little Rock
Murphy, Pat ..... Little Rock
Oates, Chas. E. ..... Little Rock
Ogden, M. D. ..... Little Rock
Pate, C. N. ..... Little Rock
Prothro, E. W. ..... Little Rock
Higgins, Homer A. ..... Little Rock
Lee, D. C. ..... Little Rock
Mumey, Nolie ..... Little Rock
Rose, W. D. ..... Little Rock
Rooks, Jno. E. ..... Oil City, La.
Vaughan, Milton ..... Little Rock
Fuller, S. J. ..... Little Rock
Wagley, P. V. ..... Little Rock
Thompson, G. D. ..... Little Rock
Wilkes, E. H. ..... Little Rock
Pettus, C. S. ..... Little Rock
Reagan, L. D. ..... Little Rock
Robinson, F. C. ..... Clarksville
Runyan, J. P. ..... Little Rock
Sadler, W. L. ..... Little Rock
Saxon, R. L. ..... Little Rock
Scarborough, J. I. ..... Little Rock
Scott, C. V. ..... Little Rock
Scroggins, J. H. ..... Little Rock
Shinault, C. R. ..... Little Rock
Shipp, A. C. ..... Little Rock
Sheppard, J. P. ..... Little Rock
Smith, Morgan ..... Little Rock
Smith, W. F. ..... Little Rock
Snodgrass, W. A. ..... Little Rock
Stover, A. R. ..... Little Rock
Strauss, A. W. ..... Little Rock
Vinsonhaler, F. ..... Little Rock
Walt, D. C. ..... Little Rock
Watkins, A. ..... Little Rock
Watkins, J. G. ..... Little Rock
Wayne, J. R. ..... Little Rock
Wayman, A. K. ..... Little Rock
Witt, C. E. ..... Little Rock
Zell, A. M. ..... Little Rock
Brooks, C. M. ..... Roland
Greene, J. L. ..... Hot Springs
Jewell, I. H. ..... Paris
Moore, G. C. ..... Wagoner, Okla.
Moncrief, J. J. ..... Bigelow
Reed, C. C. ..... Hensley

Randolph County.

Hughes, W. E. ..... Pocahontas
Hall, L. H. ..... Pocahontas
Schide, Carl ..... Pocahontas
Throgmorton, H. L. ..... Pohahontas
Pringle, C. E. ..... Pocahontas
Brown, J. W. ..... Pocahontas
Johnson, T. Z. ..... Walnut Ridge
Johnson, R. R. ..... Walnut Ridge

Saline County.

Crawford, J. B. ..... Benton
Gann, Dewell ..... Benton
Kelly, W. ..... Benton
Phillips, J. W. ..... Benton
Walton, J. W. ..... Benton
Steed, C. J. ..... Alexander
Ward, W. W. ..... Alexander
Graham, A. J. ..... Little Roek
Gann, Dewell, Jr. ..... Little Rock
Melton, J. W. ..... Slocomb
Prickett, C. ..... Traskwood
Bryant, R. H. ..... Bauxite
Gwaltney, B. ..... Haskell

Sebastian County.

Brooksher, W. R. ..... Fort Smith
Brooksher, S. L. ..... Fort Smith
Buckley, J. H. ..... Fort Smith
Bumgart, C. S. ..... Fort Smith
Cooper, St. Cloud ..... Fort Smith
Dorente, D. R. ..... Fort Smith
Eberle, J. G. ..... Fort Smith
Epler, E. G. ..... Fort Smith
Eberle, Walter ..... Fort Smith
Foltz, Jas. A. ..... Fort Smith
Foster, J. H. ..... Fort Smith
Foster, M. E. ..... Fort Smith
Goldstein, D. W. ..... Fort Smith
Hardin, A. E. ..... Fort Smith
Hampson, J. K. ..... Fort Smith
Hoge, A. F. ..... Fort Smith
Holt, C. S. ..... Fort Smith
King, H. C. ..... Fort Smith
Johnston, Hugh ..... Fort Smith
Johnson, J. E. ..... Fort Smith
Lindsey, E. L. ..... Fort Smith
Ludeau, J. E. ..... Fort Smith
Moulton, Evert ..... Fort Smith
Morrisey, A. J. ..... Fort Smith
Moulton, H. ..... Fort Smith
McGinty, J. M. ..... Fort Smith
Neal, J. Hal, Jr. ..... Fort Smith
Ozment, S. J. ..... Fort Smith
Riddler, P. A. ..... Fort Smith
Rose, Willis ..... Fort Smith
Wilson, Cons P. ..... Fort Smith
Ryan, I. A. ..... Fort Smith
Southard, J. D. ..... Fort Smith
Taylor, J. M. ..... Fort Smith
Wolferman, S. J. ..... Fort Smith
Wyatt, R. B. ..... Fort Smith
Wood, Clark ..... Fort Smith
Hall, C. W. ..... Greenwood
Perry, J. T. ..... Greenwood
Harris, Bunn ..... Jenny Lind
Hunt, W. J. ..... Hartford
Means, C. S. ..... Jenny Lind
Parks, R. F. ..... Bonanza
Coffman, J. S. ..... Lavaca
Jones, E. B. ..... Hartford
Woods, G. G. ..... Huntington

Searcy County.

Cotton, J. O. ..... Leslie
Robertson, L. D. ..... Leslie
Butler, I. S. ..... Marshall
Daniel, S. G. ..... Marshall
Wood, E. W. ..... Marshall
Henley, J. A. ..... St. Joe
Melton, A. S. ..... Gilbert

St. Francis County.

Alley, W. H. ..... Forrest City
Bogart, J. A. ..... Forrest City
Boggan, P. P. ..... Forrest City
Merritt, L. H. ..... Forrest City
Pelton, D. A. ..... Forrest City
Rush, J. O. ..... Forrest City
McDougal, J. F. ..... Forrest City
Burke, J. A. ..... Madison
Chaffin, E. J. ..... Hughes
Caldwell, A. B. ..... Caldwell
Darnall, E. ..... Widener
McCowan, N. C. ..... Palestine
Oliver, R. E. ..... New Castle
Powell, C. V. ..... Round Pond
Purnell, R. L. ..... Madison
Reynolds, J. C. ..... Colt

Sevier County.

Archer, C. A. ..... DeQueen
Hendricks, J. S. ..... DeQueen
Hopkins, R. L. ..... DeQueen
Kennedy, J. R. ..... DeQueen
Kitchens, C. E. ..... DeQueen
Clinghan, A. J. ..... Lockesburg
McCroskie, M. R. ..... Lockesburg
Musser, J. F. ..... Lockesburg
Norwood, M. L. ..... Lockesburg
Graves, J. C. ..... Lebanon
Guthrie, J. E. ..... Brownstown
Hendricks, B. E. ..... Gillham
Isbell, F. T. ..... Horatio
King, Ed. ..... Ben Lomond

Union County.

Mitchell, J. G. ..... El Dorado
Moore, J. A. ..... El Dorado
Mahoney, F. O. ..... El Dorado
McGraw, S. J. ..... El Dorado
Niehuss, H. H. ..... El Dorado
Purifoy, L. L. ..... El Dorado
Wharton, J. B. ..... El Dorado
Elkins, W. N. ..... Junction
Jarrell, Foster ..... Huttig
Murphy, H. A. ..... Wesson
Murphy, George W. ..... Strong
Rowland, R. E. ..... Little Rock

Washington County.

Christian, D. ..... Springdale
Christian, O. ..... Springdale
Henry, R. T. ..... Springdale
Martin, J. E. ..... Springdale
Ellis, E. F. ..... Fayetteville
Gregg, A. S. ..... Fayetteville
Harr, H. T. ..... Fayetteville
Gabbert, W. T. ..... Fayetteville
Hardin, Nina V. ..... Fayetteville
Miller, Otney ..... Fayetteville
Moore, A. I. ..... Fayetteville
Paddock, C. B. ..... Fayetteville
Southworth, James ..... Fayetteville
Wood, H. D. ..... Fayetteville
Walker, J. W. ..... Fayetteville
Yates, W. N. ..... Fayetteville
Batchelder, F. P. ..... Farmington
Mock, W. H. ..... Prairie Grove
McCormick, E. G. ..... Prairie Grove
Bearden, J. M. ..... Sonora
Summers, D. C. ..... Elm Springs
Hathcock, P. L. ..... Lincoln
Pittman, James ..... Cincinnati
Gray, T. E. ..... Winslow
Canon, J. S. ..... West Fork

White County

Cleveland, J. C. ..... Bald Knob
Clark, W. A. ..... Bald Knob
Abington, W. H. ..... Beebe
Abington, E. H. ..... Beebe
Hassell, J. W. ..... Searcy
Harrison, A. G. ..... Searcy
Jelks, J. M. ..... Searcy
Jones, J. L. ..... Searcy
Majors, I. B. ..... Searcy
Moore, L. E. ..... Searcy
Tapscott, S. T., Jr. ..... Searcy
Crawford, L. D. ..... Kensett
McAdams, J. C. ..... Pangburn
Fraser, N. E. ..... Pangburn
Peeler, C. M. ..... Pangburn
Doggett, Sylvester ..... Bradford
Hardy, F. P. ..... Center Hill
Hall, H. J. ..... Higden
Hassell, A. B. ..... Rose Bud
Miller, W. J. ..... Griffithville
Moore, R. B. ..... Little Rock
Nowlin, R. F. ..... West Point
Wilbern, J. M. ..... West Point

Woodruff County.

Biles, L. E. ..... Augusta
Brewer, E. F. ..... Augusta
Dungan, C. E. ..... Augusta
Patterson, R. Q. ..... Augusta
Smith, R. N. ..... Augusta
Bradford, T. B. ..... Cotton Plant
Brown, E. B. ..... Cotton Plant
Gephart, R. T. ..... Cotton Plant
McKnight, C. H. ..... Cotton Plant
Brewster, B. ..... McCrory
Frasier, R. L. ..... McCrory
Fletcher, B. A. ..... McClellan
Maguire, F. C. ..... Gregory
Morris, J. W. ..... De View
Osborne, J. M. ..... Howell
Ragsdale, V. H. ..... Fitzhugh

Yell County.

Grace, John ..... Belleville
Harkness, J. H. ..... Belleville
Linzy, C. B. ..... Plainview
Montgomery, H. L. ..... Gravelly
Love, L. E. ..... Dardanelle
Jones, Paul ..... Blue Ball

County Societies.

INDEPENDENCE COUNTY.

(Reported by L. T. Evans, Sec.)

Mt. Pleasant, Arkansas, Aug. 16, 1917.

The Independence County Medical Society met at Newark, Ark. Aug. 13, 1917. The president being absent, Dr. Frank A. Gray of Batesville presided. Members present, Drs. Gray, Johnston, Craig, Case, Hinkle of Batesville, Dr. Bone of Cushman, Dr. Long of Sulphur Rock, Dr. McAdams of Cord, Drs. Blakely, Pascoe and Rodman of Newark, Dr. L. T. Evans of Mt. Pleasant.

The courtesies of the floor were extended to Drs. Burge and Laman, visitors from Cave City. Dr. T. N. Rodman presented some very interesting cases of pellagra. One case, a woman, 38 years old, had not shown any symptoms of pellagra until an operation was performed (a part of the cervix uteri was removed) and pellagra symptoms appeared immediately.

She has improved and has shown no symptoms since 1915.

Dr. F. A. Gray read a very interesting paper on "The Treatment of Intestinal Amebiasis.

Dr. O. L. Bone reported a case of traumatic pneumonia.

The papers were discussed by all present and the meeting proved to be one of the best.

Drs. Pascoe, Craig, Robinson, McAdams and Long were appointed to read papers at the next meeting, which will be held at Batesville the second Monday night in October.

BOONE COUNTY.

(Reported by F. B. Kirby, Sec.)

The Boone County Medical Society met in Harrison on Sept. 4th. Present: Drs. J. H. Fowler, acting president; F. B. Kirby, H. L. Routh, J. C. Blackwood, J. J. Johnson and L. Kirby.

Dr. C. M. Routh sent in a paper on "Gastro-Enteritis" to be read by the secretary, F. B. Kirby.

Dr. L. Kirby reported a case of cancer of the stomach and liver, with no symptoms preceding save entero colitis.

Dr. H. L. Routh reported a case of placenta previa, in which there was about one-third of the placenta discharged prior to his arrival. The arm prolapsed, he gave chloroform and turned and delivered the child which was asphyxiated and died; woman recovered.

On motion, the discussion of the subject of caring for the practice of physicians serving in the army was deferred to the next meeting.

Dr. W. H. Poynor, who was to quiz on typhoid fever, being absent, the subject was deferred to next meeting.

Dr. J. Johnson's paper on electro therapeutics was set for next meeting.

The papers and cases were discussed.

Upon a general discussion it was the consensus of opinion of the society that it would stamp out small pox if everybody were successfully vaccinated. The society approved the State Compulsory Vaccination Law, the understanding being the law required a proper vaccination—if possible, a successful vaccination.

Dr. Wm. L. Barker, president of the Boone County Medical Society, of Harrison, has volunteered and now is serving at Little Rock with the U. S Field Hospital Service.

Book Reviews.

THE DIAGNOSIS AND TREATMENT OF ABNORMALITIES OF MYOCARDIAL FUNCTION.—With special reference to the use of graphic methods. By T. Stuart Hart, A. M., M. D., Columbia University, New York. Illustrated with 248 engravings, 240 of which are original. Published by the Rebman Co., New York, 1917. Price, $4.50.

The author of this book presents the subject from a clinical side and lays stress on the features which are of practical importance to those whose advice is sought on these questions of disordered cardiac activity.

HANDBOOK OF ANATOMY.—Being a complete compend of Anatomy including the anatomy of the viscera, a chapter on dental anatomy, numerous tables and incorporating the newer nomenclature adopted by the German Anatomical Society, generally designated the Basle nomenclature or BNA. By James K. Young, M. D., F. A. C. S., Philadelphia. Fifth edition, revised and enlarged. With 154 engravings, same in colors. Published by F. A. Davis Company, Philadelphia, 1917. Price, $2.00.

The readers of this book will find it thoroughly complete and accurate as possible, and at the same time readily accessible for reference or study.

AN INQUIRY INTO THE PRINCIPLES OF TREATMENT OF BROKEN LIMBS.—A philosophico-surgical essay with surgical notes, by William F. Fluhrer, M. D., New York. Published by Rebman Company, New York. Price $3.00.

This book describes the author's method of rapidly immobilizing broken bones by the use

of perforated narrow tin strips. Dr. Fluhrer emphasizes the importance of using antiseptic instead of sterile dressings to absorb the wound secretions. Sterile dressings saturated with such secretions and held in contact with warm tissues furnish ideal conditions for germ growth.

1916 Collected Papers of the Mayo Clinics, Rochester, Minn. Octavo of 1014 pages, 411 illustrations. Philadelphia. Published by W. B. Saunders Company, 1917. Cloth $6.50 net; Half Morocco, $8.50 net.

This book is a collection of articles prepared and read before various medical societies during the year 1916 by members of the Mayo Staff and their associates.

The papers are shown in a compact and convenient form for reading and reference. As said before in former descriptions of this work it presents a very interesting and instructive collection of papers.

The Internal Secretions.—Their physiology and application to pathology. By E. Gley, M. D., member of the Academy of Medicine of Paris; Professor of Physiology in the College of France. Translated from the French and edited by Maurice Fishberg, M. D., New York. 12 mo. cloth. 240 pages. Published by Paul B. Hoeber, 67-69 East 59th St., New York. Price $2.00.

In the first chapter of this book the author gives "The Concept of Internal Secretions; Its Origin and Development." The second chapter describes the "Distinctive Characteristics of the Internal Secretory Glands and the Principal Products of Their Activities." In chapter three he gives "The Function (normal and diseased) of the Internal Secretory Glands."

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia. Vol. II., Twenty-seventh series, 1917. Published by J. B. Lippincott Company, Philadelphia. The price of this book is $2.00.

A very attractive feature of this volume is the description of cases shown at the clinics in Philadelphia and Baltimore. Dr. L. F. Barker presents an interesting case of "typhoid fever with certain complications." Dr. Thos. McCrae's patient is that of "Jaundice with enlarged liver in a young adult." Dr. Edward Martin has a "Fracture clinic." "Skin Clinic," by Dr. Hartzell. Dr. I. H. Jones gives a clinic on "Vertigo." Other clinics and papers are given by the regular contributors.

Cataract.—Senile, Traumatic and Congenital. By W. A. Fisher, M. D., Chicago. Published by Chicago Eye, Ear, Nose and Throat College, 1917. Price, $1.50.

In this book the author emphasizes the following points:

First—A new method of acquiring technic upon the eye with the aid of four weeks old kittens.

Second—Discarding all kinds of eye specula and holding the lids away from the eye ball when operating the eye after injuries.

Third—Dressing and treatment after cataract operations.

Fourth—A modification of the Smith-Indian operation for cataract making the removal of the lens in capsule safe and necessarily the operation of choice.

Fifth—A method of treating injuries of the lens other than watchful waiting.

Sixth—A systematic procedure for determining the treatment of congenital cataract.

The Clinics of John B. Murphy, M. D., at Mercy Hospital, Chicago. Volume V., Number 6 (December, 1916), Octavo 217 pages, 47 illustrations. Published bi-monthly by W. B. Saunders Company, Philadelphia. Price per year: paper, $8.00; cloth, $12.00.

This number contains the medical history and last illness of Dr. John B. Murphy and words, In Memoriam, by Dr. E. Wyllys Andrews, Dr. J. F. Binnie, Dr. George W. Crile, Dr. John B. Deaver, Sir Rickman I. Godlee, Sir W. Arbuthnot Lane, Dr. Earnest LePlace and Dr. Edward Martin. We wish to copy from the editor's preface that, "There is no doubt at all that had Dr. Murphy been able to fill out the allotted three score and ten, surgical science would have been further enriched by the creative genius of his fertile brain."

A number of surgical cases are also described in this number and it closes with a list of the writings of John B. Murphy, M. D.

The Medical Clinics of Chicago. Volume II, Number IV (January, 1917), Octavo of 231 pages, 20 illustrations. Published bi-monthly. W. B. Saunders Company, Philadelphia, 1917. Price year year, paper, $8.00; cloth, $12.00.

This number contains the reports from eleven clinics. Dr. James T. Case, X-Ray department St. Luke's Hospital, gives an article on, "Barium Diagnosis," in which he describes the management of Roentgen studies of the gastro-intestinal tract. Routine technic

of barium meal study of the esophagus and stomach fully deseribed in a previous lecture. The present discussion coneerns the x-ray study of alimentary tract as a whole, the teehnic being given for routine gastro-intestinal study after a barium meal; graphie ehart showing normal intestinal adhesions: technic and value of the opaque enema: intestinal adhesions; value of sereening in the horizontal position: the fallacy and usefulness of the "high" enema. Method of clearing the colon without laxatives.

Diseases of the Stomach, Intestines and Pancreas.—By Robert Coleman Kemp, M. D., Professor of Gastro-intestinal Diseases at the Fordham University Medical School. Third edition, revised and enlarged. Octavo of 1096 pages, with 438 illustrations. Philadelphia; W. B. Saunders Company, 1917. Cloth, $7.00 net; half morocco, $8.50 net.

In this new edition a special seetion is devoted to radiography of gastric uleer, gastrie eancer, duodenal uleer and gall bladder diseases and a large number of radiographs of other eonditions. As the author says: "In view of the promiscuous and improper use of the term auto-intoxieation, I have inserted a brief section on 'Subinfection' and 'Protein Absorption,' and have enlarged my work on chronic intestinal putrefaction."

The author also describes the symptoms, diagnosis and treatment, notably by meehanical methods of visceral displaeements.

There is a special chapter devoted to "Diverticulitis."

Traumatic Surgery.—By John J. Moorhead, M. D., F. A. C. S. Adjunct Professor of Surgery in the New York Post-Graduate School and Hospital. Octavo volume of 760 pages with 522 original illustrations. Philadelphia, W. B. Saunders Company, 1917. Cloth, $6.50 net.

The author's idea of writing this book is to plaee in one volume the information neeessary to diagnose and treat all the usual and most of the unusual effects of aeeident and injury. Over 200 pages are given to fraetures.

The text aims to state the measures whieh Dr. Moorhead has found most praetieal. An effort has been made to unify and standardize the treatment of such eommon injuries as wounds, infeetions, burns and the usual fraetures. Stress is placed on the routine use of but few antisepties, the drainage of all wounds, the immediate and eomplete reduetion of fractures, and non-reliance upon eomplicated splints or those that hide the part or are irremovable.

The Plan o' the House o' Man, Sir, or the part water and position play in the prevention and treatment of physical disorders of the body.—By James Cabell Minor, M. D., former sanitary inspector division of the Philippines, United States Army. Author of "Negro Soldier in the Philippines"—(Collier's). Illustrated by E. W. Kemble, "Little Jed," etc. Illustrated by Theo Keller and by the author. Pictures and diagram by the author and the cartoonists, Robert Minor Jr., and Ad Goodwin. Third Edition, 1917. Price $1.00 per copy.

Dr. James Cabell Minor of Hot Springs, Arkansas, has issued a third edition of his serio-humorous book whose title heads this review. This would seem to imply that there is quite a demand for it and it deserves to be widely read.

Originally issued in 1912, a seeond edition beeame necessary in 1914 and now comes the third. We eall the book serio-humorous beeause it tells truths in a form whieh commands attention from the easual reader who will not be beguiled into reading wholly serious advice touching his "innards."

"This book is for the well man," says the author, and adds, "Of eourse, the siek man may read it. If, however, it makes him sieker he may give it to some other man with a stronger stomach. "Again in his prefaee he writes: "You ean look into this work and see the inside of yourself." "To attraet your attention to your "innards" is a bit disagreeable and indelieate, I admit: but it is not a bit less disagreeable and indelieate to have the papers announee some morning that, "Our beloved eitizen, Mr. T. H. Oughtless, was taken to the hospital yesterday and the surgeons operated on him for appendieitis." In figurative language the proeess of digestion and elimination are noted, the Gateway being the esophagus, the Kitehen the stomaeh, the Pantry the duodenum, the Dining Hall the small intestine, the Great Sewer, Ineinerator and Heating Plant the three colons and exit. Colored plates of humorous design assist the layman in following the idea. The necessity of flushing the sewer, of disposing of the contents of the Garbage Pan, of proper eating and drinking, of sleeping, of lying on the left side before rising in the morning for an hour (whieh he assures us will prevent appendieitis) together with many other common sense rules, are presented in such simple language that even the child may understand.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., OCTOBER, 1917. No. 5.

Original Articles.

ACIDOSIS.*

By B. C. Middleton, M. D.,
Texarkana.

It is my purpose in the following paper to summarize the literature, clinical and experimental, intending to outline the hazy concept we now call "Acidosis." The literature is well nigh boundless, for a study of it leads to many branches and sub-branches, each of which terminates in a maze of more or less conflicting theories supported by laboratory and clinical evidence. How often the condition occurs in its milder forms, few of us probably realize, for the majority of mild cases are usually overlooked. The well-marked cases are less common, but the clinical picture once seen is not soon forgotten.

DEFINITION.

Acidosis is a disorder of metabolism, principally of the fat-splitting and probably to a less extent, protein-splitting elements occurring in the course of, or following, a large number of clinical conditions characterized by the symptoms of varying degrees of intoxication by the acid bodies and the presence of these bodies, or corresponding substances, in the urine and blood. By acidosis we do not mean the reaction of blood has changed to any appreciable extent, but that excessive amounts of acid radicles, other than carbonic acid, appear in the body.

ORIGIN OF ACIDOSIS COMPOUNDS.

It is, at present, common knowledge that beta-hydroxybutyric acid and its two congeners, beta-ketobutyric acid and acetone, known collectively as acidosis compounds or acidosis bodies, arise from products formed in catabolism of the fats and proteins, and more specifically, from certain of the lower fatty acids, particularly butyric acid. The chemistry of the formation of these lower fatty acids from the higher fatty acids and from certain of the amino-acids, as well as the mechanism by which the lower fatty acids are converted into the acidosis compounds, cannot be described here.

CONDITIONS FAVORABLE TO THEIR APPEARANCE.

It has long been known that one prerequisite to the accumulation and the subsequent excretion of abnormally large quantities of the acidosis compounds, is a relative diminution in the rate of the carbohydrate utilization. When, for any reason, the rate at which glucose is utilized in the body falls below a certain minimum, relative to the rate of fat and protein catabolism; then the acidosis compounds appear in the blood and urine. It should be understood that when we speak of a decreased rate of carbohydrate utilization in this connection, we should have in mind, specifically, the catabolism of glucose and think not merely of an absolute decreased rate of glucose catabolism, but relative to the existing rate of lower fatty acid oxidation.

Zeller, in his experiments, in 1914, fed patients isocaloric non-protein diet. He varied the proportion of fats and carbohydrates and first noted an increased output of ammonia when the proportion of carbohydrate was below one part by weight to four parts by weight fat. He reckoned that for the complete utilization of the two molecules of fat, that is employed, at least one molecule of glucose must oxidize at the same time. Lusk suggests re-reckoning these results as follows: Two molecules of fat can yield by saponification, six molecules of fatty acid and two molecules of glycerol. The two molecules of glycerol can yield in the body one molecule of glucose. Adding this to the glucose derived from the diet directly, it would appear if we accept Zeller's results—and leave out of con-

*Read before the Arkansas Medical Society, at the forty-first Annual Session. Little Rock, May, 1917.

sideration, for the moment, protein metabolism—that six molecules of higher fatty acids required for their complete oxidation, the simultaneous utilization of at least two molecules of glucose. One might accordingly say, when the mixture of metabolites oxidizing in the body contains more than three molecules of higher fatty acid to one of glucose, then the mixture is overbalanced by acid bodies, or acidosis begins.

Likewise, some equally definite, but not identical, relationship exists between the number of glucose molecules necessary for the complete utilization of a given number of molecules of a lower fatty acid, such as butyric.

ACIDOSIS IN FASTING.

During the period of fasting, the cells naturally continue to oxidize foods. Before the fast begins the proportion of fat and carbohydrates catabolized are determined roughly by the proportion of fat and carbohydrates in the diet supplied from without. After fasting begins the proportion of fat to carbohydrates, must be fixed by the proportion in which these stuffs are supplied from the tissues themselves. The cell will be fed with what there is and the proportion with which they catabolize carbohydrate and fat during starvation must therefore depend in the end on the proportion in which these stuffs have been stored. It is accordingly clear how, with respect to acidosis, fasting may produce a variety of effects in different individuals, depending on how their bodies assay for fat and glycogen at the time fasting begins and this must depend, to a large extent on previous diet. A person in whom there is no appreciable fat and only a trace of glycogen, will necessarily, during a fast, subsist wholly on body protein. It is very doubtful whether this is productive of any acidosis of the type we are discussing, because from 45 to 58 per cent of the protein is capable of conversion into glucose and the remaining 55 to 42 per cent only a fraction consists of ketogenic amino-acids, that is, of amino acids capable of yielding acidosis compounds. Unless something interferes with the oxidation of glucose derived from protein, this glucose will probably suffice for the complete oxidation of the ketogenic fraction of the protein. This was verified by the experiments of Lang. On the other hand, if the body at the beginning of the fast contains a considerable glycogen reserve and also a normal amount of fat we would expect, at first no significant acidosis, because there would be at first enough glycogen for the proper burning of the fat. But later, since the glycogen reserve tends to run low sooner than the fat reserve, we might expect an increasing preponderance of fat in the metabolism and hence a rising acidosis. If the fasting were pushed until the fat reserve were also depleted, one might again anticipate a decline of the acidosis compounds as the metabolism returns almost wholly to a protein basis. Again, if the body at the beginning of a fast contained an excess of fat in proportion to glycogen, you would expect a quicker and more pronounced acidosis. Perhaps the sudden and sharp acidosis in fasting, observed by Folin in the obese, is due simply to the fact that these persons, thrown back on their own tissues, find them excessively fatty. It is conceivable that two people containing the same amount of fat would act somewhat differently, one develop acidosis more rapidly than the other.

PATHOGENESIS AND PHYSIOLOGY.

In the list of conditions during or following which acidosis occurs, it is evident that in a majority of cases a toxic influence precedes the actual formation of acid bodies. For instance, in the specific infections and inflammations, bacterial toxins and toxic absorption are present before acetonuria is observed. That this is no uncommon forerunner is shown by Riesches' report of 3,826 cases of diphtheria and acute anginas, of which 3,200 cases were acute diphtheria, with varying degree of acetonuria in 60 per cent. Similarly a factor of primary intoxication is discernablel in the acidosis occurring in Bright's disease, the cachexia of malignancy and toxemia during pregnancy.

In the type of acid intoxication described by Parke and Abt during the weaning period, the primary toxic element may be accounted for either in artificial feeding or by some quantitative or qualitative change in the mother's milk as the period of lactation nears its close. In the case of poisoning from phosphorus, salicylates, etc., we have as toxins, not only these substances, *per se*, but also the toxins produced by the effects of the substance on the tissues. The use of anaesthetics introduce toxic substances into the blood which vary greatly in their effect on different tissues. Chloroform may produce

serious, even fatal lesions, in the liver, and this, too, following short anaesthesia. Ether may effect the liver, but its principal effect is on the kidney. Waldvogel has concluded that a direct toxic action of the anaesthetic is responsible for the acidosis in children under his observation, and similar conclusions may be drawn from the records of Rice, Frew and others. The mechanism by which acidosis is produced from a primary or pre-existing toxic element, is shrouded in mystery, but the balance of evidence is in favor of an hepatic disturbance, resulting in abnormal processes of metabolism, the end products being the acid bodies. McClean expresses this disturbance as the result of cumulative action of absorbed toxins in the liver, with consequent failure of the organ to properly perform its functions. There follows disarrangement of carbohydrate metabolism and the resulting interference with the glycogen storing or glycogenic power of the liver, reducing the proper supply of energy producing sugar, thus inducing a disturbance of fat and protein metabolism. Nasse puts it, the lack of carbohydrate necessary to activate oxygen in the body, thereby restricts the oxidation of fats and protein to their normal end products. The acid bodies—beta-oxybutyric and diacetic acids and acetone—in acidemia, do not, so far as we know, alter to any marked degree, the alkalinity of the blood and they are practically non-toxic when administered in large doses to healthy individuals. They do, however, by their slight acid reaction, withdraw alkali from the tissues, and when present for a greater or less time, produce nephritis.

PATHOLOGY.

These cases of non-diabetic acidosis which have come to autopsy show little that can be termed characteristic. Frequently fatty degeneration of the liver is noted, occasionally, nephritis. Recent observers—Crile and others—have found histologic changes in the central nervous system, amounting to a peculiar swelling and liquefaction of the nervous tissues. The constant findings is the marked increase in the blood of acetone compounds, which are present normally in very small quantities. It has been found also, that the CO^2 tension of the blood is indirectly proportional to the degree of acidemia. Though the urine is said to show an increase in ammonia content, preceding acidosis, the first practical clinical finding is the presence of acetone as determined by the Lange or iodoform test.

Acetone is the first of the acid bodies to appear, followed by diacetic and butyric, as the condition subsides, the substances disappear from the urine in the reverse order.

SYMPTOMS.

The symptoms of acidosis in the most severe type is seen in the Coma of Diabetes Mellitus, which is a true condition of acidosis. One who has seen the air hunger, high pulse rate and noticed the odor of the breath of a diabetic in coma will recognize more forcibly the extreme symptoms. Frank of Chicago sums up the symptoms of Post Operative acidosis as follows. The first clew to an impending acidosis following an anaesthetic is practically always to be found in the pulse record in the first hour after the return of the patient from the operating room. Depending upon the duration and the depth of the anaesthesia, and on the amount of blood lost during the operation, we expect in a greater or less number of hours either a return of pulse rate to normal, or definite signs that such is in progress.

When in the early post operative period the pulse rate increases, remains stationary or lowers only slightly from the rate during anaesthesia and this, too, in the absence of signs of shock, collapse and hemorrhage, an examination should be made of the urine for acetone in marked quantity. Post Operative urinalysis has demonstrated the presence of acetone in a high percentage of all cases, and in children the finding is almost constant. In a majority of cases no symptoms referable to this condition are present and the acetone disappears under suitable diet in from one to three days. In those cases where the pulse rate is high following operation we have the first intimation confirmed by urinalysis that the patient is reacting to the presence of acid bodies. This type usually returns to normal in one to three days. In a second class of cases the high pulse rate is followed in four to eighteen hours by the appearance of languor and drowsiness, in some instances approaching stupor, and a marked tendency to restless sleep. The patient shows an increased respiration varying indirectly, according to the age of the patient, and directly to the degree of reaction, from 28 to 48 per minute. The respiration is regular rather superficial and has the odor of acetone, sweet or fruity, and is noticed especially in exhala-

tion. The face is either pale (or if the temperature is high) flushed, with usually a tinge of cyanosis. Dark circles appear under the eyes and the tongue is usually heavily coated.

The stuporous condition may vary from a mild degree to an alarming display. It is distinguished from the after-effects of the anaesthetic by the fact that the patient has already "come out" from the anaesthetic, in other words, has had an awakening period, before the onset of the secondary drowsiness. The patient is restless, and exhibits more than ordinary Post Operative thirst, and if sleep occurs it is only for short periods. Even the youngest child is quiet, only arousing himself to call for water. Examination of the urine shows acetone and a positive reaction for diacetic acid which disappears in reverse order under proper treatment, in four to six days. A third group of cases which comprise about two per cent of operated cases in children present a more severe degree of acidosis in which the rapid pulse and stupor is soon followed by frequent retching and vomiting—nothing is retained on the stomach. On entering the room one is immediately impressed that the patient looks sick, prostration is marked, stupor is a prominent feature and the cheeks are flushed, frequently cyanotic. The eyes are sunken, nervous phenomena may be present, varying from restlessness to delirium, and convulsions, even coma.

TREATMENT.

In outlining the treatment of post operative acidosis I hope to make evident the treatment of acidosis under any other condition. Treatment consists, first: Of the combatting the abnormal physiologic processes which we know are producing the symptoms.

Second: Symptomatic control. Prompt reaction to such treatment is the rule, twelve hours being sufficient to change an appalling clinical picture to practically normal health. To oppose the process we must, according to the laboratory confirmation of our present theory of acidosis, supply either the carbohydrate which is lacking in the metabolic mixture or some easily absorbable substance which will produce energy sufficient to insure the proper oxidation of fats or spare the body fats. Glucose has been the most widely used given by the mouth in varying quantities, in mild cases when the stomach is retentive. In those cases in which the stomach is irritable, rectal feeding may be resorted to. A five to eight per cent solution of glucose in normal salt solution may be given by the Murphy or drop method. Probably internal feeding is better, four to eight ounces being given. The intravenous injection of sugar causes a pronounced chill and rise of temperature but the results have been extremely successful. A solution of sodium bicarbonate may be administered by mouth or rectum. If vomiting occurs simply lavage with plain water or bicarbonate solution will be found efficious. As soon as the stomach will permit a carbohydrate diet should be instituted.

DISCUSSION.

Dr. Morgan Smith, Little Rock: I enjoyed the paper very much. I think it is a very timely paper, because the subject of acidosis has not been sufficiently studied in the past. I suspect that numbers of our fatal cases were due to acidosis instead of some other troubles which we thought were present. Our literature is full now of researches concerning acidosis. I wonder how many cases of typhoid fever, tuberculosis and other long-drawn out diseases terminated by acidosis instead of some other cause. I just want to bring out one point which I think is worthy of mention, and that is the use of bicarbonate of soda or carbohydrate as a preventive in starvation periods of cyclic or recurrent vomiting.

In these cases the presence of beta oxybutric acid and acetone does not necessarily mean the presence of acidosis; but acidosis can occur independent of the presence of these other bodies. In cyclic vomiting, it is my habit always to give bicarbonate of soda in large doses. There may be an acid condition of the stomach. We know it can never be acid in the presence of salt, but there is no doubt a relative decrease in the alkalinity of the blood. And, in the starvation condition, as we have in cyclic vomiting, and metabolism is almost at zero, it is necessary to feed bicarbonate of soda. It should be given by the stomach or by the rectum, or intravenously, if necessary. Many of these cases, or all of these cases, get well if you give them plenty of bicarbonate of soda.

Another word of warning I think would be timely, and that is in the Allen treatment of diabetes. Those of you who have had any experience with it, and have been very radical on the adoption of Allen's treatment—that is, have kept your patients on whiskey and black coffee for a period of three days or longer—probably have seen the appearance of acidosis. I think in these cases we should anticipate such condition by giving large quantities of bicarbonate of soda. I have a case in mind which prompted me to throw out this warning. It takes a chemist to make a diagnosis of acidosis. The ordinary clinician cannot do it. But the presence of acetone bodies, beta oxybutyric acid and diacetic acid ought themselves to suggest that there might be a possible danger, and anticipate such by large doses of bicarbonate of soda. In typhoid fever I am sure that a number of cases died from acidosis, or starvation; carbohydrate starvation, with the liberation of amino bodies and acid-forming bodies. In tuberculosis, in pneumonia and in other diseases I think we should look well to this possible danger, and anticipate it by proper dieting and by the use of carbonate of soda.

Dr. Cargile, Bentonville: I wish to relate quite an interesting case now on hand in which this matter came up. It is an interesting comparison with special circumstances or special conditions that I obtained. Dr. E. F. Ellis assisted me about a week ago in an operation on a child two years of age. The patient has spina bifida; the anus is absent. The rectum terminates with pouches on either side, into which you could probably insert your lead pencil—divided by a septum low down. You could see that there was no sphincter at all. It terminated in an almost rigid band. It was as rigid as a little wire. Whatever discharge came from the bowels was involuntary.

By pressing your finger down against it you felt like you were pressing a little round, hard ring. It was so rigid that the colon was distended for some distance and was adherent to a rib and had been so for some time. The abdomen was opened and we did a colostomy, in order that we might irrigate through and keep the colon clean. It had been stretched so much that its tonicity was destroyed. We hoped that by keeping the colon washed out by enemas, perhaps, the elasticity of the colon might return. He had considerable gastric dilatation, and it was deemed best to wash out the stomach with soda or salt water. We irrigated the colon through the colostomy. We could not flush the lower bowel with that kind of an anus; it would have retained everything we injected. We finally decided to use bicarbonate of soda. When we left home yesterday he was doing very well.

Dr. M. D. Ogden, Little Rock: A partial consideration of Dr. Middleton's paper very properly bears out the practical results obtained in postoperative treatment of surgical cases. The routine use of a five or seven per cent. solution of dextrose is a prophylaxis after operation, contributing very largely to the safety and early recovery and the comfort afterwards of the patient; no matter what the operation is, whether it is abdominal, intestinal or what not. Also, in the cleansing use of colonic flushing, in proctoclysis; the injection of anywhere from one to two quarts—as much as two quarts—of a five per cent bicarbonate of soda solution, as, in the cases I have seen it used, it has been of distinct benefit. The treatment is outlined very well by Pragin in his work on obstetrics, where he used two tubes, allowing one solution to run in through one tube into the colon and the other flowing out, serving the double purpose of emptying the colon and of having the patient obtain a certain quantity of this bicarbonate of soda solution, which, according to Dr. Middleton, very promptly acts as an antidote to the acidosis present, if the eclampsia is of hepatic origin.

Another point that comes in connection with that is the role played by the anesthetic in the production of acidosis or eclampsia, by injuring the liver. For that reason I think, since it is now known, that chloroform is absolutely contraindicated in eclampsia, and should not be used to control the convulsions. I have had a good many arguments on that point in the last year or so with various physicians, and perhaps some of them differ from me now. But I have seen a good many cases where I thought that dire results were directly attributable to the use of chloroform in eclampsia. I think chloroform is permissible in labor probably, but for obstetrical anesthesia, where a major obstetrical operation is to be done, I think the use of chloroform is absolutely contraindicated, as it is in eclampsia.

Dr. Middleton, in response: I haven't very much to say. I appreciate the discussions—the very able remarks by the gentlemen who have discussed it. It was more than I anticipated when I wrote the paper. The subject is so extensive that necessarily a good deal had to be omitted, but I appreciate that part that Dr. Ogden, Dr. Smith and others brought in for me.

Postoperative acidosis may be prevented by the administration of glucose before the operation. That is, of course, in certain conditions like diabetes, where the ability of the body cell to utilize the glucose is limited, where it is at a minimum, the administration of glucose at that time would not help, because the surplus would be thrown off through the kidneys. But, in the postoperative acidosis, it seems to be largely a toxic factor that causes it, so that postoperative acidosis can be prevented, according to some rather extensive reports, by the administration of glucose before the anesthetic is given.

I believe that's about all. I wish to thank the gentlemen for their appreciation while I was reading that lengthy paper. I felt like it was too long, but I could not see how to cut it any shorter.

POST-GRIPAL OTITIS MEDIA*

By J. L. Jones, M. D.,
Searcy.

In presenting this paper I do not intend to convey the idea that grip is the only cause of otitis media, but the only cause I shall speak of. Neither would I claim that otitis media is the only sequel of grip. My experience with grip in twenty years of general practice, has taught me, that a physician should not be surprised at any condition the grip left his patient in. The loss of one eye, one or both ears, one leg or one arm, or even the loss of the sense of smell.

I was always at a loss to know just what condition my patient would be left in when he had a severe attack of grip. The epidemic of grip the last two winters has given me 75 per cent of the cases of otitis media I have treated; especially the acute, and subacute. All the cases I have reference to in this paper gave a history of a late attack of grip, and the great majority of them had been in the care of their family physician, and had been treated from three days to three weeks. The greater per cent of patients had been dismissed by their physician, when the ear trouble began, and that speaks for itself. All the usual family remedies had been tried out before I saw the most of them, such as laudanum, and sweet oil, onion juice, etc. I find in the most of these patients the general condition very bad, due to the grip. I find that well-grown and well-developed children are not immune from this sequel of grip, even with healthy, and normal nose and throat. I will say with emphasis, that grip is no re-

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

spector of person. The rich, and the poor, the high and the low, the white and the black, the red and the yellow, all look alike to this monster, Grip.

In this connection allow me to state one case, as follows; Mrs. W. C., age 31, mother of one child, three years old, had ovaries removed six months before this date; had been confined in bed with grip two weeks before her ears began to trouble her, and had at this time been suffering with her ears ten days. Pharynx and larynx inflamed, and angry; tonsils normal in size. Temperature and pulse normal. She gave a history of having a rigor ten days before, with severe pain in both ears. This pain continued for twenty-four hours, when her ears began to discharge bloody pus; pain ceased and her ears had not troubled her only from the increasing discharge. She had a very distressing cough, so distressing, indeed, she could hardly talk. Drumheads perforated; external ears swollen and angry. As I stated before the general condition of these patients is below par, and the treatment should be to restore their general health. In other words, all local treatment, and no constitutional treatment will bring these patients to their normal self very slowly, if at all. For this lady's cough, which was a post-gripal condition, I gave her four doses of "Influenza Vaccine" with most satisfactory results. Her cough was entirely gone with the last dose of the vaccine. I have used this in a goodly number of these cases, and have not failed to find it very satisfactory. If your patient has catarrhal symptoms, you can not do better, as a rule, than to give this serum. With this serum treatment followed by a suitable tonic treatment, and the proper local treatment, such as I have outlined below, the patients may be restored to their normal health, and hearing also.

If these patients could be persuaded to have the proper attention at the beginning of this trouble, much suffering and anxiety would be prevented, and many ears would be restored to their normal condition.

The sooner treatment is begun the better. A beginning ear infection can frequently be aborted by means of the ice bag, a mild cathartic, fluid food and rest. If the pain is severe, one dose of an opiate is permissible. More than this may mask the symptoms.

The hourly irrigation of the ear with a warm solution of boracic acid is also allowable. Ear drops and application in general are apt to be more harmful than beneficial. The ear should be kept clean. An ear ache should not be permitted to last longer than twelve to twenty hours. It is the symptom of an active and perhaps a serious infection, and prompt relief is demanded. It is decidedly unwise to wait for the drumhead to rupture or even bulge. It is far better to open the drumhead prematurely than to allow the infection to spread. If on opening the drumhead, no fluid is found, the incised drumhead soon heals, and no harm is done.

It is needless to state that all work upon the ear should be done under the rules of surgical asepsis. Many lives have been sacrificed through delay in dealing with a middle ear infection. Within a short time Dr. Ballinger saw three persons with meningitis from neglected ears. Your essayist, in the last few years has seen two deaths from neglected ears.

There are other disadvantages in waiting for the spontaneous rupture of the drumhead to take place. The opening is apt to be faulty. Either it fails to provide adequate drainage, or else the drumhead is needlessly perforated. Such an aperture mends with difficulty, and if repair does not take place, the hearing eventually becomes affected, by reason of the intra-tympanic adhesions.

Never should the drumhead be incised without the aid of a general anesthetic, preferably a whiff of chloroform; especially in children, should this be done. The incision should be a free one, not merely a stab. Beginning in the lower quadrant, the incision should sweep upward, and backward behind the ossicles and near the rim of the drumhead, and outward into the swollen periosteum of the canal. It depletes and drains the edematous tissues, and helps to prevent mastoiditis.

When an infected middle ear is opened, serum is released, seldom pus. In a few hours the discharge becomes copious, and purulent. The more active the flow the better the result. Generally, relief follows the operation. If, however, the symptoms do not abate, it is evident that the infectious material within the mastoid cell is unable to escape into the middle ear proper, and that more drastic measures are required. Ordinarily the after treatment of an incised drumhead, is simply to keep the ear dry, and clean.

Irrigations should be used sparingly, if at all. Used too frequently, they keep the drumhead in a soggy state, and hinder repair. A saturated solution of boracic acid, with the addition of a little alcohol, makes a good cleansing lotion. A poisonous solution, such as bichloride of mercury, should not be employed in children, lest it escapes into the throat.

The cotton swab is the best implement for cleansing the ears. Regarding the treatment of a running ear, the prescribing of drops without first ascertaining the precise nature of the lesion in the ear is as unscientific as it is generally unavailing. The use of peroxide of hydrogen is especially objectionable. If it gets into the middle ear it may not be able to escape. The local remedies used to control an aural discharge have for their object the stimulation of the sluggish mucosa to a healthy action. Quite often a discharge of long standing can be brought under control in a short time by the daily use of an alcoholic solution of boracic acid dropped into the ear. A persistent discharge may require something stronger, perhaps a twenty-per-cent solution of iodine, or else a ten-per-cent solution of chromic acid. Stimulation by the use of heat to induce hypermia is most useful in certain stubborn cases.

DISCUSSION.

Dr. R. H. T. Mann, Texarkana: I enjoyed the paper very much, indeed, especially that part of it in which he recommends an early incision of the drum membrane. In all cases of ear-ache, where there is a red, inflamed drum, this drum should be immediately incised, because by doing so you establish free drainage and prevent, very often, further complications. The most serious complications which may arise is an involvement of the mastoid or of the brain. No doubt very many lives have been sacrificed because the drum membrane has not been properly incised in time, so as to allow free drainage, and these complications do arise. I am going to illustrate this.

Two or three months ago a colleague, a friend of mine, asked me to come down and do a mastoid operation for him on a lady who had been suffering with la grippe. I went and did this operation. While there he asked me to see another patient, who had also had la grippe with an ear complication. I saw this woman. She then had an involvement of the brain, and I thought meningitis, and I didn't advise an operation because I thought it was too late. She died very promptly. Then he wrote to me a week or ten days later that another woman had taken la grippe, and had an ear complication and a mastoid involvement, and died very promptly, without any operation. Now, it is barely possible that had these two patients had their drums incised and free drainage through the canal, they might be living today. I say, if it had been done early, it is barely possible.

Another thing that I want to emphasize about Dr. Jones' paper is that in all these cases there should be a careful cleansing and looking after the nose and throat to prevent, as far as possible, the infection into the middle ear, because this infection is carried from the post-nasal space down the eustachean tube, and the ear is infected in that way. Now, by strictly keeping the nose and throat clean, as free from infection as possible in these cases, this infection may be—I don't say it can be in every case—but it might be prevented from invading the middle ear. I wish to thank the doctor very much for his paper.

Dr. F. Vinsonhaler, Little Rock: I am very much indebted, with Dr. Mann, to the doctor for his clear and forcible expressions on the subject. It is one that the general practitioner treats first. He sees it first, and the responsibility for operative interference rests with him in the first instance.

There are two things that I want to speak of particularly in connection with the ear, and one of them is the method of anesthesia. If you have ever had your own drum perforated by means of a knife without an anesthetic, you will appreciate very much what I say. Every one who has an operation of that kind ought to be allowed the privilege of being under a general anesthetic. Now, the ideal anesthetic for the opening of a drum is nitrous oxide gas, or "laughing" gas. That is not available in the majority of cases where an operation becomes necessary, and consequently you are called upon to use other anesthetics; I think chloroform or ether especially are advisable. But wherever nitrous oxide gas can be used it ought to be, because it is comparatively safe. It is practically without risk, and it gives a very short anesthesia. It can be given on a full stomach and without the ordinary preparation that you make in administering chloroform or ether. There is only one objection to the nitrous oxide in these ear operations. It is unsafe on very young children. I used to give it freely, in every case. Now I don't use it in children under two years of age. I use ether or chloroform. I was called upon perhaps a year ago to do a double operation, to incise both drums in an infant of about a year and a half old. The nitrous oxide gas was administered by an anesthetist, who is perfectly competent. He is a very experienced man in giving the nitrous oxide. At the time there was anesthesia sufficient to do a paracentesis, the child was taken with severe convulsions, and these convulsions lasted, it seemed to me, for about a minute. I thought the child was going to die. Up to that time I had given nitrous oxide freely, and without any reservation to infants of all ages, but since that time I have avoided it in young children, especially children under two years of age. I don't think it ought to be administered in those cases.

With reference to the general treatment of grip complications, I think that the doctor has been much more fortunate in his results from the use of the vaccines than have the rest of us. We have not been able to secure the results that he has by use of the vaccines, in a general way, in the treatment of these cases, and the reason that most of us assign for this is that in cases that are classified as purely grip, or as due to the influenza bacillus, we are not quite certain as to the etiology. The records of the boards of health in the larger cities in cases that are reported as influenza do not harmonize with these results. For instance, in the city of Chicago, in a number of cases that were reported as influenza, a microscopical examination of the discharge from the patient's nose revealed the fact that at least 42 per cent. of them were due to streptococci, about 30 per cent. to pneumococci, and about 1 out of 30 were really due to the influenza bacillus; so that you can understand that if you really are going after the influenza bacillus by means of a vaccine which is prepared especially for that, you will miss it in a

great many instances. Of course, we understand that most of these influenza vaccines are prepared for the organisms also, polyvalent doses, but, notwithstanding all of that, we have not, most of us, been so successful or so fortunate as has the doctor by means of the vaccines. I think the paper is clear, distinct and forceful, and one that we can listen to with great interest and profit.

THE BIOGRAPHY OF A GALL-STONE.*

By Estill D. Holland, M. D.,
Hot Springs.

We hear so much these days of the removal of gall-stones and the surgical treatment of gall-stones, that it might be interesting to reremind ourselves of the most common etiology of gall-stones.

Modern medicine is making every effort to determine the cause of the disease in order that individual treatment may more nearly fulfill its mission of cure; and it seems to me that in delving for new facts we sometimes fail to take advantage of what we have already learned.

A gall-stone is usually the natural result of a certain sequence of events starting with an abnormal gastric condition, and to remember this sequence of events is to be perfectly sure of the logical treatment.

Suppose, to start with, that we have a catarrh of the stomach from any cause; this means an increased thickening of the mucous membrane of the stomach lining. It is very improbable that we can have an irritation of the stomach lining without also having a thickening and catarrh of the duodenum from the same cause.

The common bile duct empties into the duodenum a few inches below the cardiac end of the stomach and the opening of this gall duct is very small—naturally a thickening of the lining of the duodenum around the opening of the gall duct means a lessening of the lumen of the duct and an obstruction to the free flow of bile.

If the bile cannot flow freely we have first a filling of the gall-bladder, causing a distension of the gall-bladder walls which, in turn, causes an inflammation of these walls with an increased secretion of cholesterin. This may go on until the gall-bladder is greatly distended, causing more and more of a stagnation of the bile, with a consequent precipitation of bile salts; and the precipitation of bilirubin-calcium provides the cementing substance necessary to the cholesterin for the formation of gall-stones.

Now, by far the most common stomach ailment is a hyperacid stomach, and the natural sequent of a hyperacid stomach is an irritant catarrh of the lining of the stomach—so the most natural thing to do in treating a gall-stone due to a hyperacid stomach would be to relieve the hyperacid stomach condition, and then remove the gall-stones.

Suppose the patient has a catarrh of the stomach and duodenum and also has an acidity; here there is a possibility of an infection in the gall-bladder causing pus which might form the nucleus of the gall-stone upon which the cholesterin is deposited. Here, again, the proper thing to do is to overcome the gastric abnormality, if possible, and then remove the stones.

One might go on indefinitely giving different conditions that might cause gall-stones, but ninety per cent of the causes would be traceable to the stomach and would require treatment, before, during and after operation.

I have no faith in any medical means of removing gall-stones, in fact, I have no faith in any medical way of stimulating the liver except through water; gall-stones should either be let alone or removed, but neither have I any faith in the surgical treatment of gall-stones—there isn't any such treatment.

If a man has an ulcerous condition of the foot and it becomes necessary to amputate his leg above the knee, one doesn't speak of it as a treatment of ulcer of the foot. It is necessary and has to be done, but it isn't a treatment in the sense of curing the ulcer or removing the cause of the ulcer.

There is no more reason in referring to the removal of a few gall-stones as the treatment of gall-stones than there is to the removal of a leg as the treatment of an ulcer.

Like a good many other things, the best treatment for gall-stones is never to allow yourself to have them, but that isn't practical in our day. The next best treatment is to remove the cause and then remove the stones.

Look upon every case of stomach trouble as a potential gall-stone breeder, diagnose it carefully, treat it thoroughly, and gall-stones will become a curiosity. When you find a gall-stone case treat the gastric condition just as thoroughly and when the cause of the formation of gall-stones has been overcome, have

*Read by title before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

the stones which have already formed removed.

Gall-stones offer a field for the united efforts of the physician and the surgeon and the best results are only obtainable where the two work in harmony.

A NEW TREATMENT OF ACUTE SALPINGITIS.*

By J. W. Butt, M. D.,
Helena.

The treatment of acute salpingitis, as given in most of our standard works upon gynecology, is about as follows:

Rest in bed; ice cap to abdomen; a laxative or enema; morphia for pain; light diet; hot douches, one or twice a day. Some books recommend tampons of ichthyol and glycerine introduced into vagina. The hot douches and the glycerine tampons are used with the idea of depleting the pelvic organs—the douches acting by stimulating the pelvic circulation, and the glycerine acting by dehydration. The chief objections to this treatment are: (1) The hot douche must be given properly to be of any benefit, and even when it is given properly it entails quite a bit of exertion upon the part of the patient. And the patient who is suffering so intensely does not need any more exertion than is absolutely necessary. (2) The pain is not very readily relieved by hot douches, which means that a number of doses of morphia are required. It is true that the hot water relieves pain as long as it is being applied; but the pain soon returns when the douche is finished.

For some time I used the methods outlined above, and the results were not satisfactory. The pain eventually disappeared, because the tendency of this condition is to grow into a chronic stage. But it took such a long time to get relief from the pain. The following method has seemed to me much more satisfactory and to bring about a much quicker relief:

When the diagnosis of acute salpingitis has been made, put the patient to bed. Introduce a bivalve speculum into the vagina, and secure a good exposure of the region posterior to the cervix, mop the vagina dry with pledgets of cotton and then introduce a half ounce of magnesiumsulphate, which has had the water of crystallization driven off by heating. A convenient method of introducing the salt is to fill an ordinary test tube with it and pour it down the lower lip of the speculum, endeavoring to get it against the cul-de-sac. A tampon of absorbent cotton is now introduced and the speculum withdrawn. This procedure is repeated every twenty-four hours for a period of time varying from six to twelve days. In addition to the magnesium sulphate, I order an enema or saline laxative and light diet. In the very beginning, one dose of morphia may be necessary; but the relief following the application comes usually in a very few hours and no opiate is necessary.

The question may be asked: "Why is this a good treatment?" It is both a good treatment and a rational treatment, because the magnesium sulphate acts as a dehydrating agent, tending to relieve the pain by lessening the tension of the exudate both in the tubes and the pelvis, and it is this tension which causes pain. For years, we have known of the beneficial effects of a saturated solution of magnesium sulphates upon an acutely inflamed joint. There seems to be an analogy in the action upon an acute pelvic inflammation.

My experience with this treatment has been limited to about fifteen cases. One was so typical that I shall report it briefly: A colored female, age 22, primipara, presented typical symptoms of acute salpingitis; seen about eight hours after onset was very nervous and I administered morphia grains, one-sixth by needle. One hour later I introduced magnesium sulphate into the vagina and she spent a good night, having very little pain. Twenty-four hours later I removed tampon and did not introduce magnesium sulphate, leaving orders for ice cap at abdomen, enema, and a hot douche. This was to see, if possible, whether the magnesium sulphate really relieved the pain. This was in the morning. That afternoon I was called to patient, as she was suffering intensely. This time she did not get a hypodermic; but I introduced some more magnesium sulphate into the vagina and the pain was controlled in a few hours. After six more treatments at intervals of twenty-four hours, patient felt fine; had practically no pain from time of second treatment and bimanual examination revealed very little tenderness in either of the fornices, though there was still a palpable mass on either side.

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

The following ease was reported to me by my friend, Dr. K. J. Kinkead, of Birmingham:

A colored female, age 23, primipara, suffered with acute salpingitis for thirty-six hours. Magnesium sulphate was introduced; patient was easy in four hours, and spent a good night. After two more treatments, she got up and felt fine and for two months has had no further trouble. The abdominal tenderness to pressure disappeared in thirty-six hours.

I have called this a new treatment, beeause I have never seen it mentioned in literature. It is not original with me; but was suggested to me by Dr. J. M. Bodenheimer, of Shreveport, Louisiana. I think it is original with him.

The advantages of this treatment are:

1. It is simple. The materials are always at hand or easy to proeure.

2. It almost eliminates the neeessity for a nareotie.

3. It probably decreased the amount of exudate, thereby decreasing the number of adhesions which cause future trouble.

4. Where the proeess is eonfined to the left side—rarely the ease—I believe that the amount of exudate is so decreased that we have a symptomatie cure. On the right side, the appendix keeps up the inflammatory proeess.

5. It is a treatment which involves a minimum of disturbance to patient.

6. It is entirely under the eontrol of the doctor—a most desirable feature.

In conclusion: I have had only a small number of eases so far; but as my eases inerease, I firmly believe that I shall beeome more and more enthusiastie over this treatment. It is well worth trying and I believe that you will get results quieker than by any other method you have used. The point I would impress upon you is this: It does not cure salpingitis; but it does relieve the acute attaek.

DISCUSSION.

Dr. M. G. Thompson, Hot Springs: I thank the doctor for the paper; I eujoyed it. I had some experience with hypodermic injections of sulphate of magnesia. I have never tried the local applications, as he has; but I have on numbers of occasions given hypodermic injections of solution of sulphate of magnesia to relieve pain and found it very satisfactory.

I had an old womau from Louisiana who had resisted all medication. I gave her a weak solution of sulphate of magnesia hypodermatically and relieved the pain, and she never had any return of pain. I waut to say that iu all those cases you have to have a very weak solution, and, as a rule, the injectiou is painful. I remember having a boy who resisted all medication, aud I gave him a hypodermic of sulphate of magnesia, and he complained greatly. The next day he said he was better. The doctor in the office with me insisted that the boy was afraid to say he wasn't better for fear I would give him another injectiou. But, in two days, he had a relapse, and he eame up voluntarily and asked for the injection. So, I am much impressed with sulphate of magnesia as a local anesthetic.

D. C. Walt, Little Rock: Epsom salts is a very important drug. It has its limitation like everything else. By some it might be thought that I have no right to speak of Epsom salts. When I was voted out of the university the question was asked why? The only answer was "Epsom salts." Maguesia has a strong affiuity for carbon. Carbon is the destructive element of toxic values, whether in the gas main, the damp of the well, the venom of the snake, or strychnine. If you will take a teaspoonful of sulphate of magnesia, dissolve it in a glass of hot water, dissolve a teaspoonful of carbonate of soda in a glass of hot water, add them together while hot, you will fiud a striking and beautiful illustration of the precipitate in the shape of iusoluble carbonate of magnesia, produced by the attraction of magnesia for carbon, allowing the sulphur to remain in solution with soda, demonstrating its neutralizing value on carbon products. I don't consider, strictly speaking, that there is a specific in disease, because it takes multiple values to produce disease, even germs being secondary to condition when they produce harm.

Dr. Butts, in response: In reply to Dr. Walt, I think he used the word "specific." Iu the close of my paper I used these words: "It is uot a cure, but it does relieve the acute attack." As to how magnesium sulphate acts I don't know, to tell you the truth about it, but I think it is by osmosis. It is not a question of the pelvic circulation at all, but it is a fact that when those tubes get inflamed they drop right down into the cul de sac and they are hypertrophied in time; they are distended, and probably some of the exudate is thrown out into the pelvis. Now, I do use this sulphate of magnesia as a dehydrating agent. I only ask the doctor to try it in his cases of acute salpingitis, aud he won't worry about how it acts or how the pelvic circulation is affected.

WHAT A $50 BOND WILL DO.

The proeeeds of one fifty-dollar Liberty Loan Bond will purehase:

Thirteen 13-pounder shell for destroying submarines.

Four five-inch shells for the same purpose.

One hundred pounds of smokless powder.

Eighteen gas masks for a like number of soldiers at the front.

Enough eoal to drive a destroyer one hundred and twenty miles.

Enough gasoline to drive a submarine destroyer one hundred and fifty miles.

A sailor's uniform outfit.

Four months' subsistenee for a soldier.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

VOCATIONAL RE-EDUCATION.

The office of the Surgeon General, War Department, has sent out to the secretaries of all state and county medical societies a letter setting forth that the Surgeon General is arranging for a speeial treatment for wounded and others suffering from injuries or chronic ailments who are thereby disabled from following their usual employment. This is a war measure of vast benefit to the partially disabled, as well as a means of eonserving the energies of the producers. Thus, one having lost a right hand might be a carpenter who can be educated to use his left hand, or he could become a gardener. There are cases in which one having lost both legs can still be very useful in some line of endeavor. Many such among the wounded of the British and Freneh are employed regularly. Inasmueh as all the resources of the country are the result of labor the importanee of having the partly disabled continue to do their bit will at onee be seen. The Surgeon General asks the medical soeieties to aid in this work by sending lists of the partly disabled in their several eounties with the charaeter of the disability, at what the person is employed, how sueeessful he has been and how he learned his new oeeupation. While this work will devolve on the secretaries, the members ean help by informing them of cases within their knowledge. Names are not required, but the information will be of invaluable worth to the War Department in the future in dealing with sneh eases.

THE SOUTHERN MEDICAL ASSOCIATION MEETING.

The Southern Medical Assoeiation will hold its annual meeting at Memphis, November 12-15, and it is hoped that a reeord attendanee will be established. It will be well worth while. The war situation should increase the attendance rather than otherwise. In this strenuous time it is very essential that physicians learn all that is humanly possible and we ean always continue to learn. This is one profession in whieh the very oldest and most famous practitioner never gets through learning, if he would keep up with the proeession.

There will be notables at the meeting, of army and navy experienee. Colonel Robert E. Noble, head of the Personnel Division of the Medieal Reserve Corps, under the direetion of Surgeon General Gorgas, and Rear-

Admiral Grayson, President Wilson's physician, will be there and discuss questions pertaining to the army and navy, respectively. Colonel T. F. Goodwin, of the British Army Medical Service, will tell of the work of the army surgeons in France; Surgeon General Rupert Blue will describe the sanitation work of the training camps and cantonment zones; Dr. Franklin H. Martin, of Chicago, will outline the great work of the General Medical Board of the Council of Defense, and John Sharpe Williams, Mississippi's famous senator and orator, will talk on "America's Part in the Great War." The Carrel-Dakin method of treating infected wounds and the paraffin treatment of burns will not only be described by Dr. William S. O'Neal Sherman, who spent a year in France, but he will demonstrate these methods by means of motion pictures—only a degree from an actual clinic.

All these matters the profession is most vitally interested in at this time. Nearly every doctor, not actually superannuated, expects that he may go to the front, thousands have volunteered to go. The experience will be most wonderful, a month being worth years in hospital practice and worth many post-graduate courses. In fact, the average practitioner is likely to have more actual experience in a week, nay in a day, perhaps, in surgical cases than he would have in his whole career in actual practice. Such being the case and with the array of famous physicians in attendance, every member who can by hook or crook manage to go to the meeting should by all means do so—if he has to borrow the money.

It may be added that, beside the notables mentioned who will address the sessions, the regular scientific program will be carried out and the Entertainment committee has done all possible to insure a most enjoyable and profitable visit.

Editorial Clippings.

NOW IS THE TIME.

Right now, at the beginning of the Fall season, is the time to overhaul your county medical society and inject new life.

The general disorganization caused by war preparations has had its effect on medical organizations in many communities. This must not be. There never was a time in the history of the State when the need for intensive organization was greater. There never was a time when it was more necessary to maintain a high standard of efficiency in the medical profession.

Not only problems incidental to wartime are pressing, but many home conditions will need attention during the coming months. It is of the greatest possible importance that county medical societies keep in touch with the survey that has been started by the State in the field of sickness insurance. The executive secretary has arranged to keep the legislative committeemen of each society in close touch with the progress of this survey, and these problems as they arise should be made the subject of careful discussion in county society meetings T.his is a big subject—the biggest that has ever faced the profession in this State, and unless we keep in touch with it from the start irreparable damage may be done.

KEEP IN TOUCH WITH YOUR DISTRICT COUNCILOR. IF HE DOESN'T VOLUNTEER TO VISIT YOUR SOCIETY, GET AFTER HIM. KEEP HIM INFORMED AS TO YOUR PROGRAMS, AND IF THERE IS INTERNAL TROUBLE IN YOUR ORGANIZATION, CALL HIM IN.

And, for goodness' sake, support your county society officers when they attempt to speed up things and get results. Remember, they are not paid to cajole you into attending meetings or reading a paper. They are doing it, unselfishly, in an honest endeavor to improve medical practice conditions in your county, your State and the nation.—*Ohio State Medical Journal.*

Abstracts.

MEDICAL SERVICE OF THE FUTURE.

Otto P. Geier, Cincinnati (*Journal A. M. A.*, Sept. 29, 1917), says the social problems are changing and the medical profession must follow. The question whether it is so is naturally raised and he takes up three of the well defined modern tendencies to discuss. These are, the needs of higher standards of private practice, by refinement in diagnosis and treatment through group practice. 2. The needs of higher standards of public health (emphasizing school dispensaries). 3.

The development of industrial medicine—a new specialty. A scientific attainment will come with meeting the first of these and the application of science to the ultimate social good will proceed largely through the other two. With this introduction he discusses questions of social insurance and criticises the rather hasty legislation at present proposed. Individual success and happiness judged by the social needs is dependent on health; the cost of disease is a very serious matter. Physicians do not fully comprehend, he says, their direct relation to sociology and their sphere of usefulness is hindered by the pushing forward of social workers who have only an imperfect comprehension of the medical side of the subject. The physician should be a leader in the community in all problems of disease, insanity, crime, delinquency and dependency and he discusses what plan of social improvement should be taken up by the medical profession. No social progress in matters of health can be made which is not preceded by progress in medicine, and his general conclusions are given as follows: "1. Private health practice and public health practice must be improved. 2. The knowledge of the prevention of disease, its diagnosis, and cure must be advanced. 3. Higher personal and ethical standards must prevail. 4. This better day will be hastened by a more general adoption of the group practice plan. 5. More men must fit themselves for the distinct specialty of industrial medicine. 6. The supervision of school children and children of school age should be extended through the establishment of school dispensaries. 7. These methods, together will constitute an adequate medical service, and be a forward step in the ultimate socialization of medicine."

SURGICAL SHOCK.

Yandell Henderson, A. L. Prince and H. W. Haggard, New Haven, Conn. (*Journal A. M. A.*, Sept. 22, 1917), in a preliminary note report some of the results of a study of surgical shock. They selected as their part of the co-operative investigation of the subject carried on under the National Research Councils: (1) bearing of excessive and prolonged secretion of epinephrin on the production of shock; (2) the relation of acidosis to shock; (3) the oxidated metabolism in shock. As regards the first of these, experiments on cats and dogs by infusion into the femoral vein, thus keeping up the blood pressure to a very high level from one half hour to two hours, led them to the conclusion that excessive secretion of epinephrin (if it occurs under pain) is not a critical important factor in the production of shock. It is therefore improbable that surgical shock is the result of surgical shock of the suprarenals, secondary to sensory stimulation. Some years ago a theory of shock was put forward from their laboratory which assigned the development of acidosis largely to decrease of the carbon dioxid content of the blood from the excessive breathing induced by ether, pain, and fear. The occurrence of acidosis with shock was in fact recognized in their former papers and it appears desirable to investigate further the relation of acidosis to shock and the excessive breathing as above stated. Ten dogs were employed in the experiments which are detailed, and the question was raised as to whether the hyperpnea of ether excitement and pain or whether the accompanying decrease of carbon dioxid combining power in the blood was the cause of the shock. "The apnia theory assigned a primary role to the hyperpnea, while the acidosis theory now current would make the hyperpnea merely secondary. Does the alkali of the blood control the carbon dioxid or the carbon dioid the alkali? In most forms of acidosis the former is the case. In shock, however, the latter may, in part at least, be the true sequence. It may be recalled that in experiments on shock previously reported from this laboratory it was found that when excessive loss of carbon dioxid was prevented by rebreathing procedures, the carbon dioxid content of the blood was only slightly lowered, and the shock either did not result or was much reduced in intensity. These facts suggest that the acidosis of ether anesthesia is compensatory to or a result of the apnia produced by the hyperpnea of ether excitement." The acidosis or the reduction of the alkali reserve is, at least in respect to respiration, clearly of a compensatory character, otherwise the intense apnia would quickly result in a fatal apnia. In their metabolism experiments where the oxygen consumption and carbon dioxid elimination were closely observed before and after shock, they found the oxygen consumption falling 45 per cent. in one experiment and 50 per cent. in another, showing a profound depression of metabolism progressive in character and end-

ing fatally. They mention, in closing, the possibility of obtaining information on this point from the use of the gas mask at the front in the present war which will enable us to test the practical question whether rebreathing will prevent or decrease the development of shock in the severely wounded as it does in animal experiments.

PRACTICAL THERAPY.

Samuel E. Earp, in the *Medical Summary* for June, considers practical and tried therapy. He states that formulae that have stood the test, whether they act as a palliative or curative agent, always have an important bearing and oftentimes are more welcome to the reader without verbose attachments. He presents a number of these which he has found efficacious both in private and hospital practice. In functional derangements of the liver with engorgements elsewhere, with tinted or muddy skin, and constipation, he keeps the bowels open with Dorsey's magnesia mixture, which contains sulphate of magnesia and aromatic sulphuric acid. He then gives:

Rx. Tr. nucis vomicae.....4 drams
Acidi nitromuriat. dil.....4 drams
Tr. Cinchonae Co. q. s. ft....4 ounces

M. Sig. One teaspoonful (glass spoon) in a tumbler half full of water three times a day before meals. To protect the teeth, wash the oral cavity with hydrate of magnesia before and after taking. In corrosive sublimate poisoning he advises in addition to the routine treatment, 5 grains of methylene blue and 10 grains of urotropin, every four hours. In leg ulcers of old people he uses, when skin grafting or substitutes are not used, a warm boric acid solution, dilute liquor antisepticus, or Dobell's or Burow's solution, diluted, and afterwards a prescription of:

Rx. Ichthyol.....2 drams
Bals. Peru .....2 drams
Ung. zinc oxid benz. ad.....2 ounces

M. Sig. Apply twice daily to ulcer, and keep leg elevated and at rest. He also advises scarlet red. For hot fomentations he uses thin sections of sponge, 8x10 inches, dipped in hot water or diluted vinegar, and then cover with hot water bottle. For dry heat he thinks highly of the little Japanese stove, in plush, which burns punk. The stove costs 25 cents and the punk one cent each. It will smolder and hold heat 24 hours, unchanged, pruritus can often be relieved by equal parts of milk of magnesia and liquid petrolatum with the addition of Sig. antisepticus alkalinus. It should be well shaken before using. Diluted Burrow's solution sometimes acts well, but as a rule watery solutions are of little avail. In infectious diseases with a high temperature where the bath is not well borne, and if the heart is strong and in the early part of the disease, he advises the local use of guaiacol 20 minims and glycerin 40 minims. This is applied after shaving hair from the back or abdomen and covering with oiled or waxed paper, used once a day or as needed. In bronchial asthma he prefers the ammonium iodide to other iodides. He believes that we should reclaim the tinctures of aconite and veratrum, and there seems at present a tendency in this direction, notably in the fevers of childhood. In follicular tonsillitis he prefers locally with a camel's hair brush.

Rx. Zinci sulpho-carbolate .....15 grains
Glycerin ..... 4 drams
Liq. antisepticus alkalin ... 4 drams

M. Sig.—Apply locally.

For the "old people's heart," those with an intermittent pulse and irregular manifestations, he finds sparteine sulphate in one-grain doses of great service. He gives it 2 to 4 times a day and can be given with digitalis if desired. The syrup of iodide of iron is his favorite in enlarged cervical or inguinal glands and locally an ointment of iodide of lead with lanoline and petrolatum.

TRAUMATIC NEUROSES.

Edward E. Mayer, Pittsburgh (*Journal A. M. A.*, Sept. 22, 1917), discusses the traumatic neuroses with special reference to their medical legal relations. They have become of special interest at the present and Oppenheim reaffirms and amplifies his former views from his experience with the war neuroses. He believes more firmly than ever that we are dealing in some of them with an overstimulation and exhaustion of the nervous system. Other authorities of more or less note have attacked his view and Mayer says that the shock hypothesis of Monakow seems to him a valuable conception. It is well recognized that any catastrophic event may stop the brain from receiving any information and we start, therefore, with the premise that the stoppage of cerebral activity may result after a trauma.

This need not be structural any more than syncope is, but it must be of such a degree that the individual cannot adjust himself to it. Emotional reaction and its motor responses follow. The result is similar to the overcapacity of cells which in diaschisis causes a physiologic stoppage of function. Once established, harmful emotions keep up their influence in many ways. Unconscious wish factors often determine them. Mayer goes over the attempts of classification which have been made. Each case must be judged by itself. He says, we need hardly call attention to the fact that were pension and compensation not involved physicians would not trouble to comment on the traumatic origin of the neuroses, and he agrees with Dercum as to the pernicious influence of litigation. Our method of jury trials is unfair and how to mend it is difficult to say. It tends to multiply so-called medical experts and it is difficult to see how to mend matters. If it were possible to make the compensation of medical experts by making it a part of the expense of the trial some improvement would be obtained. The jury system seems to put a premium on exaggeration and he would suggest that testimony of all court physicians be placed on file by the county societies. Publicity would tend to stop a certain class of medical testimony that is produced under our present system. A physician finds a great difficulty in securing an opportunity properly to examine a claimant for damages if he is not retained by the claimant's side, and medical legal opinion should not be based on subjective symptoms and only objective opinions should be used or permitted in stating a diagnosis in court. Hypothetic questions will be continued to be used but distorted medical facts, exclusion of important symptoms make them generally of no value. If the physician has made an examination of the claimant he should refuse to answer any hypothetical questions unless they include his objective findings and his answer should be predicated on them. While the expert is required to accept as true the evidence included in the hypothetic question, he is permitted to qualify his answer to make it plain that he can have no expert opinion on evidence not agreeing with his objective findings and he should never be satisfied with categoric answers. Most statistics regarding prognosis should not carry much weight in court because of the personal equation of the accident and the social status of the patient and in the different groupings found in statistics and variations in the laws of different countries. In general the physician is not truthful who gives his opinion that a traumatic neuroses of any kind cannot recover. Interested corporations should work to secure a law giving the privilege of re-examination at any future time; the results of such re-examination, showing that the compensation was based on false claim, would give the court power to reopen the case. The need of a more elastic system governing accident compensation is plain and he commends the physicians and surgeons in Leeds, England, who consult before the trial and make it an organization matter, that a member should give full and impartial testimony. They have thus solved much of the problem and Mayer says, "Let us hope that our medical societies may at no distant time establish similar standards of honor and professional conduct."

Personals and News Items.

Dr. Ernest L. Posey of Van Buren has moved to Magee, Miss.

Dr. and Mrs. Robert Caldwell, Little Rock, have returned from a visit with friends and relatives in Indiana.

Dr. F. E. Baker of Stamps was married to Miss Margaret Burleson of Wortham, Texas, September 9, 1917.

Physicians should take cognizance of the rising tide of living cost and charge more for their services.

The secretaries of the county societies are reminded that the Journal will publish reports of their meetings.

Lieut. Frank W. Mackoy, M. C., U. S. R., Fort Smith, is attending the Chicago School of Military Roentgenology, Cook County Hospital, Chicago.

Physicians visiting in Little Rock this month include: J. S. Wilson, Rye; W. W. Hornsby, Booneville; J. R. Lynn, Hazen; E. T. Bramlitt, Malvern; T. J. Stout, Brinkley.

"If your society does not have regular meetings, if the programs are uninteresting and unreliable, if only a part of the eligible men in the county are members, and if the members do not pay their dues promptly, get a secretary with a little more pep."

"If you and eleven hundred other members of the Arkansas Medical Society will read the advertisements every month and will give reference in your purchases to those who use our space, we will guarantee to give you a much larger and a much better Journal."

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas physicians commissioned in the Medical Reserve Corps published last month, the Surgeon General reports:

Albert E. Tatman, Eureka Springs, 1st Lieut.
Herbert Othello Darnall, Columbus, Capt.
Carl Sperry Bungart, Fort Smith, 1st Lieut.
Miles Everett Foster, Fort Smith, 1st Lieut.
Horace Porter Routh, Hartford, 1st Lieut.
Edwin Page Bledsoe, Little Rock, Capt..
Raymond Clyde Wolfe, Little Rock, 1st Lieut.
Robert Cam Meadors, Marvel, 1st Lieut.
Claude Wilson Brace, Piggott, 1st Lieut.
Lycurgus Gardner, Russellville, 1st Lieut.
Bunk Clinton Clark, Sunny Side, 1st Lieut.
Perry Crittenden Williams, Texarkana, Capt.
Thomas E. Gray, Winslow, 1st Lieut.

ANOTHER LIE NAILED.

When the American Osteopathic Association held its annual meeting in Columbus early in August, the statement was issued that osteopaths have been admitted to the medical service of the United States army on a par with licensed physicians. Press agents employed by the Ohio osteopaths dilated on this alleged fact to their heart's content, gleefully asserting that the army medical corps had "broken down" and that the government found it necessary to turn from medicine to osteopathy.

At the time we doubted the statement, but as there is considerable confusion in Washington we were not able to secure an authentic denial until recently. This evidence of the unreliability of the claims made by the osteopaths is reinforced by the leading editorial in the September number of *The Journal of Osteopathy*—which is published at Kirksville, Missouri. We quote:

OSTEOPATHS TURNED DOWN.

"Osteopaths have been refused commissions in the Medical Service of the United States Army, despite the assurance published a month ago that they would be allowed to take the same examination as those having an M. D. degree. When the actual examination papers of osteopathic physicians came into Washington, with applications for commissions, the papers were returned, not accepted. The judge advocate general had ruled that the M. D. degree was essential."

We wonder if the osteopathic press bureau will give the same publicity to this as to the previous announcements.—*Ohio Medical Journal.*

CHANGE IN THE CONSTITUTION AND BY-LAWS OF THE ARKANSAS MEDICAL SOCIETY.

The committee on constitution and by-laws at the May meeting recommended the following changes to be voted on at the Jonesboro meeting, May, 1918:

To the House of Delegates of the Arkansas Medical Society:

We, your Committee on Constitution and By-Laws, recommend that the following changes be made in the constitution and by-laws:

1st.—That Section 2, Chapter 4, be amended as follows: After the word "thereof" in the fifth line to read as follows: "provided that its annual report and assessments are in the hands of the secretary 30 days prior to the annual meeting. Each component society, however, regardless of its number of members, which has complied with this section, is entitled to one delegate."

2nd.—Section 3, Chapter 7, be amended as follows: Omit the last ten words of the section.

3rd.—Section 8, Chapter 9, be amended as follows: After the words "into whose jurisdiction he moves" add "and this request must be made within twelve months."

4th.—Section 5, Chapter 9, be amended as follows: Omit the following words beginning in line 6: "who is a graduate of a reputable medical college."

5th.—Section 3, Chapter 6, be amended as follows: The treasurer shall give bond in the sum of $3,000.00.

6th.—Section 4 shall be amended as follows: The secretary shall give bond in the sum of $3,000.00.

7th.—Section 3, Chapter 5, be amended as following: Change the word "morning" to "afternoon."

MEDICAL OFFICERS AND THEIR DESIGNATION OF STATION ON DUTY AT CAMP PIKE, 87TH DIVISION, NATIONAL ARMY.

DIVISION SURGEON'S OFFICE.

Lt. Col. Robt. M. Thornburgh, M. C.
Major Chas. E. Freeman, M. C.
Major Russel R. Jones, M. R. C.
Capt. August Gossow.
1st Lt. Arthur G. Compton.
1st Lt. Aloys S. Heithaus.
Dr. Frederick F. Fahlen.

BASE HOSPITAL.

Major Alfred P. Upshur.
Major Arthur A. Small.
Major Amos J. Straw.
Major Geo. B. Campbell.
Capt. James J. Roberts.
Capt. William E. Richards.
Capt. Erskine H. Oderneal.
Capt. Francis Vinsonhaler.
1st. Lt. Carl R. Comstock.
1st. Lt. Jesse C. Eldridge.
1st. Lt. Myron L. Morris.
1st. Lt. Montague M. Myers.
1st. Lt. John S. Jenkins.
1st. Lt. Wm. K. Read.
1st. Lt. Newton A. Seehorn.
1st Lt. Isaac S. Butler.
1st. Lt. Seaborn J. Fuller.
1st. Lt. Richard T. O'Neal.
1st. Lt. Horace W. Graves.
1st. Lt. Thomas M. Barnett.
1st. Lt. David O. Bridgeforth.
1st. Lt. Clarence L. Sicard.
1st. Lt. Robert E. Sellers.
1st. Lt. Mortimer Warren.

334TH FIELD ARTILLERY.

1st. Lt. Andrew J. Lyons.
1st. Lt. Otis S. McCall.
1st. Lt. Earl D. McLean.

335TH FIELD ARTILLERY.

Major Harold C. Herrick.
1st. Lt. Treston R. Ayers.
1st. Lt. Mads J. Fiksdal.

336TH FIELD ARTILLERY.

1st. Lt. Harley G. Bickford.
1st. Lt. Albert S. J. Smith.

345TH INFANTRY.

1st. Lt. John B. Close.
1st. Lt. Clarence A. Richards.
1st. Lt. Stanton A. McCool.
1st. Lt. John W. Berry.

346TH INFANTRY.

1st. Lt. Chas. E. Swezy.
1st. Lt. John W. McGuire.
1st. Lt. Frederick N. Bjerkin.
1st. Lt. Ernest M. Box.

347TH INFANTRY.

Capt. James W. Thornton.
1st. Lt. Emory H. Gist.
1st. Lt. William A. Kriesel.
1st. Lt. Frederick J. Smith.

348TH INFANTRY.

1st. Lt. Braxton V. Powell.
1st. Lt. Fordyce B. Rogers.
1st. Lt. Edgar M. Griffith.
1st. Lt. James C. Walton.
1st. Lt. George H. Lowthian.

AMBULANCE COMPANY NO. 345.

Capt. Nolan Stewart.

AMBULANCE COMPANY NO. 346.

1st. Lt. John B. Steele.
1st. Lt. Paul R. Howard.
1st. Lt. John F. Knox.
1st. Lt. Wm. R. Palmer.
1st. Lt. Willard S. Howard.

AMBULANCE COMPANY NO. 347.

1st. Lt. Chas. H. Lerrigo.
1st. Lt. Albert M. Dawson.
1st. Lt. John A. Crabb.
1st. Lt. Seth L. Cox.
1st. Lt. David C. Mumford.

FIELD SIGNAL BATTALION.

1st. Lt. Edward K. Ellis.

312TH ENGINEERS.

1st. Lt. William C. Bundrant.
1st. Lt. John W. Johnson.
1st. Lt. George Edwards.

FIELD HOSPITAL.

1st. Lt. Ray H. Davies.
1st. Lt. John N. Thorpe.
1st. Lt. James W. Powers.
1st. Lt. Rowland P. Yeagle.
1st. Lt. Harry J. Huene.
1st. Lt. Walter E. Whalen.

New and Nonofficial Remedies.

CHLORINATED EUCALYPTOL-DAKIN: Eucalyptol chlorinated at ordinary temperature. It is used as a solvent for dichloraime-T. The Abbott Laboratories, Chicago.

CHLORINATED PARAFFIN OIL-DAKIN: Liquid petrolatum, chlorinated at ordinary temperature. It is used as a diluent for solutions of dichloramine-T. in chlorinated eucalyptol-Dakin. The Abbott Laboratories, Chicago.

BETANAPHTHOL BENZOATE-CALCO: A brand of betanaphthol benzoate, complying with the New and Nonofficial Remedies standards. The Calco Chemical Co., Bound Brook, N. J. (Jour. A. M. A., Sept. 8, 1917, p. 821).

CALCREOSE: A mixture containing approximately equal weights of creosote and lime in chemical combination. It is stated that, when administered internally, calcreose has the

same actions as creosote. It is claimed that it is not likely to produce gastric distress, nausea or vomiting. Calcreose is sold in the form of powder, as Solution Calcreose and as Calcreose Tablets, 4 grains. The Maltbie Chemical Co., Newark, N. J.

Concentrated Solution Sodium Hypochlorite-Mulford: A 5 per cent. aqueous solution of sodium hypochlorite containing free chlorin equivalent to 0.2 to 1.0 per cent of sodium hypochlorite. One volume is diluted with nine volumes of water and the amount of boric acid required (stated on the label) to render the solution neutral is added. This dilution is used in the irrigation method of treating infected wounds. The H. K. Mulford Company, Philadelphia, Pa. (Jour. A. M. A., Sept. 1, 1917, p. 727).

Thiocol-Roche: Thiocol is the potassium salt of orthoguaiacol sulphonic acid, obtained by sulphonating guaiacol. Thiocol-Roche acts as a sedative expectorant. It has the advantage over guaiacol in that it is comparatively tasteless, does not disturb digestion and is non-toxic. It is claimed to be useful in the treatment of diseases of the respiratory tract, incipient tuberculosis and certain diarrheas. Thiocol-Roche is supplied in the form of a powder, as Syrup-Thiocol and as Thiocol-Roche Tablets, 5 grains. The Hoffmann-La-Roche Chemical Works, New York. (Jour. A. M. A., Sept. 15, 1917, p. 911).

Dichloramine-T. Abbott: Paratoluenesulphonedichloramide. This is said to act much like chlorazene, but capable of being used in solution in eucalyptol and liquid petrolatum, thus securing the gradual and sustained antiseptic action. Like chlorazene, dichloramine-T. Abbott is said to act essentially like the hypochlorites, but to be less irritating to the tissues. Dichloramine-T. Abbott is said to be useful in the prevention and treatment of diseases of the nose and throat. It has been used with success as an application to wounds, dissolved in chlorinated eucalyptol and chlorinated paraffin oil. The Abbott Laboratories, Chicago.

Hyclorite: A solution of chlorinated soda, each 100 Gm. being stated to contain sodium hypochlorite 4.05 Gm., sodium chloride 3.20 Gm., calcium hydroxide 0.25 Gm., inert salts 0.92 Gm. It contains not less than 3.85 per cent. available chlorine. Hyclorite has the action and uses of solution of chlorinated soda, U. S. P., but its available chlorine content is greater. One volume of hyclorite diluted with seven volumes of water has the same available chlorine content as neutral solution of chlorinated soda-N. N. R. and is said to be isotonic. The available chlorine content of hyclorite decreases at the rate of about 12 per cent. per year. In order that allowance for this deterioration may be made in the preparation of dilutions to be used in the irrigation treatment of wounds, each bottle of hyclorite bears the date of bottling. The General Laboratories, Madison, Wis. (Jour. A. M. A., Sept. 29, 1917, p. 1081).

Propaganda for Reform.

Spurious Neosalvarsan: "Dr." Nicholas Clements is under indictment in New York City for manufacturing and selling imitation neosalvarsan. The material was put up in packages made to resemble in outward appearance the genuine article. It proved to be common salt colored yellow. (Jour. A. M. A., September 15, 1917, p. 930).

Musterole Poisoning: D. I. Macht reports the case of a scarlatiniform eruption, evidently caused by an application of Musterole, a proprietary composed essentially of lard or some similar material, oil of mustard, menthol and camphor. Macht reports on the effects of mustard oil and warns against its careless use. (Jour. A. M. A., September 15, 1917, p. 901).

Fake Neosalvarsan:—The Department of Health of the City of New York has prepared a table whereby the spurious "neosalvarsan," recently located there may be identified. The department urges physicians to destroy all salvarsan and neosalvarsan containers after use of the drug, to prevent illegitimate use of these containers. (Jour. A. M. A., September 22, 1917, p. 1021).

K-Y Lubricating Jelly: The Council on Pharmacy and Chemistry reports that K-Y Lubricating Jelly (Van Horrn & Sawtell, New York), originally advertised as a lubricant for instruments and the hands, is now also recommended as a theurapeutic agent. The Council held K-Y Lubricating Jelly in conflict with Rules 1, 4, 6 and 10. (Jour. A. M. A., September 29, 1917, p. 1102).

Emetin Diarrhea: Emetin not rarely produces a bloody diarrhea in the course of its clinical use in the treatment of amebic dys-

entery. The symptoms and the gross appearance of the stools in emetin diarrhea are almost indistinguishable from those of amebic dysentery. Contrary to a prevalent opinion, children are not especially resistant to the effects of emetin and the dosage for them must be graduated with great care. (Jour. A. M. A., September 15, 1917, p. 916).

Bon-Opto: Bon-Opto is advertised to make weak eyes strong. The following non-quantitative and meaningless formula is furnished: "Chloretone, Zinc Sulphate, Sodium Chloride, Boric Acid, Menthe Poivree, Camphre de Menthe." The State chemists of New Hampshire report that Bon-Opto contains: sodium chloride (common salt) 39.52; zinc sulphite (white vitriol) 6.83; boric acid 39.69; menthol, a small amount. (Jour A. M. A., September 1, 1917, p. 750).

Chamley, Cancer Quack: S. R. Chamley, sometimes spelling his name Chamlee, is the "cancer cure" quack who frightens impressionable women into the belief that "any lump in woman's breast is cancer." In spite of repeated prosecutions by the postal authorities, he is still active. Now he offers to instruct homeopaths and eclectics in the "cancer cure" business. Chamley asks that mail be sent to "Homeopathic Cancer College," Los Angeles, Cal. (Jour A. M. A., September 1, 1917, p. 749).

Wilson's Wa-Hoo Bitters: "C. K. Wilson's Original Wa-Hoo Bitters" was sold as a "Great Blood and Nerve Tonic" and as an unfailing specific for partial paralysis, St. Vitus Dance and all forms of weakness. Federal chemist reported the product to be a watery solution (slightly sweetened) of Epsom salt, salicylic acid and a laxative plant drug with indications of sassafras, gentian and prickly ash. The therapeutic claims were declared false and fraudulent by the government authorities. (Jour. A. M. A., September 1, 1917, p. 750).

"Nikalgin": A recent issue of Collier's contains an article on "Nikalgin." Far-reaching claims for its anesthetic and antiseptic virtues have been made. While no very definite information seems to be forthcoming regarding the preparation, it has been said to be "composed of quinine, hydrochloric acid and urea." This would indicate that "Nikalgin" may be nothing more wonderful than the well-known local anesthetic, quinine and urea hydrochloride, or a modification of it. (Jour. A. M. A., September 22, 1917, p. 1024).

Ammonol: The New York Medical Journal advertises Ammonol as "The Stimulant, Ethical Antipyretic and Anagesic." There we learn, in part, that this very ordinary mixture of acetanilid, ammonium carbonate and sodium bicarbonate is "a specific in Fevers, Neuralgia, Atonic Dyspepsia, Pneumonia, Gastralgia, Bronchitis, Coryza, Catarrhal Influenza, La Grippe, Rheumatism, Hysteria, Alcoholism, Amenorrhea, Dysmenorrhea, Uterine and Intestinal Colic, Obstinate Vomiting, Catarrh of the Bile Ducts and Jaundice." (Jour. A. M. A., September 22, 1917, p. 1010).

Venarsen: F. A. Brayton used Venarsen in a series of active syphilitics to determine its therapeutic value. The clinical study was made because many physicians consider this sodium cacodylate preparation as an efficient substitute for salvarsan, even referring to it as "Denver Salvarsan." His study confirms the experiences of others, namely, that Venarsen is worthless in the therapy of syphilis. He also reports that a venous sclerosis was produced in each case in which the drug was administered and that it is capable of producing a severe nephritis. (Jour. Ind. State Med. Assn., September 15, 1917, p. 339).

Pierce's Anuric Tablets: According to the World's Dispensary Medical Association, Anurie is the newest discovery in chemistry, whereas, in fact, it is a worthless and dangerous nostrum sold as a cure for kidney disease. The A. M. A. Chemical Laboratory reports that from a qualitative analysis, Anuric Tablets contained sugar, acetate, iodid and salicylate of either sodium or potassium, quinine, aloin, hexamethylenamin and plant drugs. The composition of the tablets was so evidently irrational and absurd that an exhaustive analysis was not deemed worth while. (Jour. A. M. A., September 15, 1917, p. 930).

Wheeler's Tissue Phosphates: A leaflet devoted to the exploitation of Wheeler's Tissue Phosphates approvingly quotes the criticisms of the hypophosphites and the glycerophosphates by the Journal A. M. A. However, the leaflet fails to quote the Journal's estimate of the "Tissue Phosphates" which was: " 'Wheeler's Tissue Phosphates' is an unscientific shotgun mixture whose most active and powerful drug is the alcohol it contains. Thus it was not years ago relegated to

the realms of obsolete and discarded preparations is a commentary alike on the lack of scientific discrimination and on the power of advertising.''' (Jour. A. M. A., September 22, 1917, p. 1010).

American-Made Synthetics: The Council on Pharmacy and Chemistry announces that, with the aid of the A. M. A. Chemical Laboratory, it proposes to make a study of the quality of American-made synthetics. This control of synthetic drugs, which, as a result of the war, are now made in this country, is believed to be in the interest of the American industry, for the protection of the public and for the satisfaction of physicians. Since the manufacture of some of the synthetic drugs is to some extent experimental in this country, the Council feels confident that the responsible manufacturer will welcome this study as the best way of establishing complete confidence in his products. (Jour. A. M. A., September 22, 1917, p. 1018).

Ferrivine, Intramine and Collosol Iodine: The Council on Pharmacy and Chemistry reports that Ferravine, Intramine and Collosol Iodine, sold in the United States by E. Fougera & Co., Inc., were found inadmissible to New and Nonofficial Remedies. Ferrivine and Intramine are advertised for the treatment of syphilis, while Collosol Iodine, mercury and iodides are recommended as adjuvants. A carefully controlled clinical trial made by L. W. Harrison and C. H. Mills and reported in the Lancet indicated that Ferrivine and Intramine are inefficient as spirocheticides and that the local and general reactions that follow the injection are severe. They say that in the case of Intramine ''the pain is undiluted torture.'' (Jour. A. M. A., September 8, 1917, p. 841).

Volatile Irritants in Collapse: To determine the action of so-called circulatory stimulants that are commonly administered by subcutaneous injection in shock or allied conditions, Lieb and Herrick have studied the effects of injections of alcohol, ether, camphor and ether, camphor and oil, and turpentine in animals decerebrated so that the pain factor would be entirely excluded. They conclude that the transitory rise in blood pressure that these medicaments produce is entirely reflex in character. The heart plays little or no part in the process, the response being effected through the vasomotor apparatus. The use of injections of camphor in oil, or camphor in alcohol, to stimulate an anesthetized or profoundly prostrated or unconscious patient, therefore, has no experimental justification and its employment is seriously to be questioned. (Jour. A. M. A., September 22, 1917, p. 1008).

Eskay's Neuro Phosphates: The Council on Pharmacy and Chemistry reports that Eskay's Neuro Phosphates (Smith, Kline & French Co., Philadelphia, is claimed to contain alcohol 17 per cent. and sodium glycerophosphate 2 grains, calcium glylcerophosphate 2 grains, strychnine glycerophosphate 1-64 grain, in each dessertspoonful. It is called a ''Nerve Tissue Reconstructive'' and the advertising claims are based on the discredited theory that certain disorders are due to a deficiency of phosphorus in the nerve structures of the body, and that glycerophosphates are assimilated more readily than ordinary phosphates. The Council held Eskay's Neuro Phosphates ineligible for New and Nonofficial Remedies because of the unwarranted therapeutic claims made for it, because the combination is irrational and because the name is not descriptive of its composition. (Jour. A. M. A., September 29, 1917, p. 1102).

Tyramin as an Adjunct to Morphine in Labor: Henry G. Barbour, Yale Universersity Medical School, aided by a grant from the Therapeutic Research Committee of the Council on Pharmacy and Chemistry, has studied the effect of tyramin on the action of morphine in labor. In labor morphine exhibits one desirable effect, analgesia, and two untoward results, namely, respiratory depression in the child and delay of labor. Experimental work at Yale having given no support to the use of scopolamin as an adjunct to morphine in labor, tyramin and similar bodies were studied. Animal experiments demonstrated that tyramin (para-hydroxyphenyl-ethyl-amin-hydrochlorid) counteracted the respiratory depression of morphine. In man, from 40 to 50 mg. of tyramin, administered simultaneously with a therapeutic dose of morphine of 16 mg., completely antagonized the depressant action of morphine on the respiration. The effects of morphine-tyramin on normal labor is being studied at Yale. So far it appears that analgesia is as complete as if morphine were given alone. The respiration of the mother is increased rather than depressed and the condition of the children is quite satisfactory. Further, the uterine con-

tractions have always been increased in frequency and in degree. (Jour. A. M. A., September 15, 1917, p. 882).

County Societies.

ARKANSAS COUNTY.

(Reported by E. B. Swindler, Sec.)

The Arkansas County Medical Society met in Stuttgart on the 8th of October. Members present, Drs. John, Whitehead, Sillin, Hill, Morphew, Moorehead, Swindler.

Officers elected for the coming year:

President, Dr. R. H. Whitehead, Tichnor.

Vice-President, Dr. B. L. Hill, Stuttgart.

Secy-Treas., Dr. E. B. Swindler, Stuttgart.

Delegate to State meeting, Dr. L. H. Morphew, Stuttgart.

Alternate, Dr. M. C. John, Stuttgart.

A new fee schedule was discussed, but no action taken.

ASHLEY COUNTY.

(Reported by J. C. Simpson, Sec.)

The Ashley County Medical Society met at Portland, September 5, 1917. The members attending were entertained with a delicious supper at the Portland Hotel, being the guests of the Portland doctors. The regular meeting was held in the office of Dr Cockerham, being called to order and opened by President Dr. A. E. Cone. Minutes of last meeting read and approved. A resolution was read by the secretary concerning the departure of Dr. Shipman. Discussion as to what could be done toward forcing the opening of a dam which obstructed the natural drainage of the city of Portland. Decided that the dam should be inspected by the County Judge and County Health Officer and the question to be brought up at the next County Court—the people of Portland to get up petition stating that the above mentioned dam is a menace to the health of the people of Portland and undesirable to them. The following papers were read and discussed: "Our Opportunity," by Dr. J. C. Simpson; "The Doctor's Lethargy in Commercial Strife," by Dr. E. M. Sherrer.

NO HEALTH DEPARTMENT, STATE OR LOCAL, CAN EFFECTIVELY PREVENT OR CONTROL DISEASE WITHOUT THE KNOWLEDGE OF WHEN, WHERE AND UNDER WHAT CONDITIONS CASES ARE OCCURRING.

Book Reviews.

THE MEDICAL CLINICS OF NORTH AMERICA.—Volume 1, No. 1 (The Johns Hopkins Hospital Number, July, 1917.) Octavo of 193 pages. 14 illustrations. Published bi-monthly. W. B. Saunders Company, Philadelphia, 1917. Price per year: Paper, $10.00; cloth, $14.00.

Contributors to this number are as follows: Theodore C. Janeway, M. D.; Lewellys F. Barker, M. D.; Herman O. Mosenthal, M. D.; Thomas P. Futcher, M. B., M. D.; Louis Hamman, M. D.; Thomas R. Brown, M. D. In Dr. Futcher's clinic a case of Acromegaly is presented, illustrating the chief features of the disease. The article closes with a successful treatment for this condition.

SANITATION FOR MEDICAL OFFICERS.—Medical War Manual No. 1. By Edward B. Vedder, M. D., Lieut.-Col. Medical Corps, U. S. A. Illustrated. Published by Lea & Febiger, Philadelphia, Penna., 1917. Price $1.50.

This book gives in compact form such data as may be useful to medical officers as a guide for sanitary work. It can be conveniently carried in the pocket of a uniform. In writing the section on transmissible diseases the author presents the most recent knowledge concerning the etiology and transmission of the diseases in question, together with all information necessary upon which to base a sanitary campaign for its control. This work has been authorized by the Secretary of War and under the supervision of the Surgeon General and the Council of National Defense.

THE MEDICAL CLINICS OF CHICAGO.—Volume II, Number VI (May, 1917.) Octavo of 252 pages, 46 illustrations. Philadelphia. W. B. Saunders Company. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

In this volume clinics are shown describing the following conditions: jaundice; cases of chronic entercolitis associated with the presence of protozoa in the stools; carcinoma of the esophagus; a case of hemopneumothorax; pernicious anemia; gonorrheal arthritis; cardiac arythmia; tabes dorsalis; presentation of a case of carcinoma of the hepatic flexure; luetic infection of the lungs; hematemesis; spontaneous pneumothorax due to emphysema; acute nephritis following tonsillitis. By reading "The Medical Clinics" regularly one will receive a post-graduate course of unusual scope, giving the clinical teachings of the greatest medical centers of the country.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., NOVEMBER, 1917. No. 6.

Original Articles.

MALIGNANT GROWTHS.*

WHAT DO WE KNOW OF THEM? WHENCE DO THEY COME?

By A. Wilson Hale, M. D.
Nashville.

We read and hear of benign and malignant growths. These terms do not mean the same; the one designated in most text-books as innocent; the other as dangerous to life. Are benign growths really harmless? No. We are prone to attach too much importance to the words innocent and benign. They are really like pet friendly bears—some time they are going to prove angry, unkind, even dangerous to life—finally they slay. We are rapidly learning that so-called benign as well as malignant growths prove dangerous to life in time.

I would like to give you an illustrative sketch:

A person comes to the doctor's office. "Doctor, see here, I have a small growth. A few weeks ago it was scarcely noticeable, but lately I notice it is somewhat larger than it used to be. I thought I would have you examine it." It is examined. He is told that it looks benign, to let it alone; and that if it ever gets to giving any trouble to come back.

A few months later this same person returns. This time most of the growth is a little larger than formerly, but with a slight degeneration or beginning ulceration in one part. An ointment is prescribed which the patient uses faithfully for several months, the patient having been cautioned that whatever he does, not to let any one cut it or treat it, as they might "scatter it through the system." Simply let it alone and use the ointment.

After a time the patient notices the lesion growing worse. He drifts from one physician to another, receives varied but similar advice, finally loses all confidence in doctors; tries various ready-for-sale ointments; orders many cures by mail. His confidence in the advertised article is great because of its wording.

Several years pass. By this time all his relatives and friends have heard that Bill has a cancer. He went, at the suggestion of a friend, across three or four states to a physician who knew, and what do you suppose the doctor said. "It is cancer in the inoperable stage." Bill goes home with his enlarged glands and enlarged and ulcerated excrescence and empty pocket-book. It is too late even to take out a life insurance policy limited to one hundred dollars for burial purposes only.

Who slept peacefully for several years, gentlemen? Are we all not guardians of the public health? We are told that Nero fiddled while Rome burned. What difference did it make to Nero? Ignorance or gross indifference, which? The result was the same. We most all remember Bill of our community.

Would it not be better to advise our patients to have removed completely and at once every condition that might lead to a very unhappy termination in the years to come if let alone or if only mildly tampered with; or shall we continue to barricade ourselves behind such terms as "treacherous," "very prone to return, et cetera," when it dawns upon us that the condition was cancerous and reached the inoperable stage almost in our own hands?

Every person so unfortunate as to be afflicted with an inoperable cancer will tell you of its starting point from one or two to thirty or more years ago! Ask them! What did different doctors do and say? Ask these sufferers also!

Gentlemen, should we not become versed in the knowledge of diagnosis, precaution and prognosis in this as well as in all other departments of medicine and surgery until the physician in every nook and corner of this

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

State as well as other states, are able to be a unit and a correct one with their advice? Educate the public that there are two stages of cancer and only two: one in dormancy; the other in activity; and that just as soon as any evidences whatever of a dormant focus becomes apparent, not to delay, but secure its removal at once.

How many of us worry over whether it is a benign or a malignant growth, or whether irregular modulations can be determined upon palpation, and delay! delay!! delay!!! and let the patient also delay as a result of our indecision? Do we stumble on the historical facts that carcinomata are epithelial in origin, either epiblastic or hypoblastic, and that sarcomata are of connective tissue type or mesoblastic? Do we stumble whether there is or is not a capsule? Do we delay by taking a slice and trying to differentiate with a microscope whether it is benign or malignant; whether carcinomatous or sarcomatous; whether squamous, spheroidal or cylindrical celled; whether schirrous, encephaloid or colloid; whether giant, round, spindle celled or mixed? I might humorously suggest that even while we determine conclusively, we could have had the entire mass removed, but in this stage with probably the usual result. But are we going to continue to let them reach that stage where microscopic differentiation is a scientific pleasure, not a benefit? It is all right for the scientific investigator, but I believe we could best save our microscopical eye for worm eggs, blood work, casts and bacteria, where it can do some good.

The exact cause of cancer is unknown. Whether misplaced cells during pre-natal life, a peculiar ferment, a micro-organismal influence or other causes working alone or simultaneously, we do know that cancers form in this country and certain facts about them. They all have definite and indefinite starting points. We are told so often that they usually occur in persons past the meridian of life. Why are we so told? We are told also that repeated irritation seems to be a factor in their development. What? In their development. Then the conclusion must be reached that there was a more or less lengthy dormant period before activity was awakened. We see then how the term "over forty" has thrown thousands of physicians off their guard either on account of a lack of explanation or misinterpretation.

All agree that cancer is at first local, later becomes regional, then sooner or later a general distribution of the diseased cells ensues; that cancer materially is composed of cells which rapidly undergo deterioration but are rapidly reproduced; that the cells pack the adjacent lymph channels so that recurrence of growth after removal is likely. They are fatal in a few months or years, usually by secondary internal cancer or by carcinomatous thrombosis of a vein, multiple emboli forming. Cancer seems not to be inoculable through its expressed juice, but the live cells are capable of being transplanted into living tissue causing cancer in a new subject. This has been demonstrated and promulgated by investigators in the case of mice. We should work to handle malignant growths not later than the local stage to be successful, and this and prior stages are perhaps analagous to the dormant stage. You may ask how long does the dormant stage last? It should last no longer than it takes to remove it, when at all evident.

I would suggest that what should concern us most are the cancers in the dormant stage and offer a list so academic that all it may lack is scientific nomenclature:

(1) Any so-called tumor of whatever variety, however small;

(2) All growths, either symmetrical or irregular, no matter what size;

(3) And all nodules, elevations or lumps, appearing at any age;

(4) Moles—all kinds;

(5) Warts—all kinds;

(6) All ulcers or sores upon any part of the body, that are not specific or of known infection, which do not heal in normal time, or extend upon the application of various medicaments or even if left alone.

The diagnosis, then, is apparent—simple inspection for external conditions; palpation, exploratory incision and inspection for internal conditions.

Treatment: The early removal of all conditions as outlined.

Removal includes two methods: Surgical and Escharotic.

No more beautiful results can come from surgery in all of its departments when the field is asceptic and the technic correct, if the operation be in time. The knife is the best treatment for all internal growths. Both methods are applicable to surface growths.

Treatment by the knife is all right if extended into a sufficiently wide area so as to

excise all of the cancer cells, even then it is a very uncertain procedure and good only where anatomical regions permit, as there are many cases where the knife is not adapted. The surgeon here must select which cases the knife will give the best results with the minimum deformity. In those cases where the knife is not adapted, the only hope lies in the escharotic method.

Escharotics are those agents which destroy a tissue to which they are applied. We may use either the actual or the potential. The best, probably, are the potential, which act chemically and of them the best are those which combine with the albumin of the tissues. The potential are superior to the actual on account of the emission of heat by degrees instead of total accumulation, eliminating the necessity of a general anesthetic, and even a local anesthetic is rarely ever needed, as there is very little pain; and also the potential possesses the rare property of exerting a selective affinity for the diseased portion, causing a line of demarcation and separation nicely and cleanly from the sound healthy tissue.

The escharotic method causes nature to form a protective barrier in the tissues adjacent, thereby limiting the passage of cancerous cells into the lymph or blood stream during the devitalization and separation on the same principle that nature forms an abscess wall around pus foci as a barrier to protect the system from pyaemia.

The Escharotic method is admirably adapted to growths of the face or skin of any part of the body, especially where there exists signs of beginning degeneration, and the growth does not extend to any very great depth; and the reeurrence, judging from a number of cases, seems to be reduced to the least degree, as no severed lymph channels and small blood vessels remain open-mouthed in which live cancer cells may lodge and grow, as it is a known fact that cancer is transferable only by transplanting live cancer cells in an abraded or freshly cut surface of a living animal; also the combination method is sometimes used, following the knife with an escharotic to devitalize any remaining live cancer cells.

The Escharotic method absolutely does not cause any constitutional disturbance; it precludes any danger of germ infection; insures healing as quickly as after the use of the knife, and is not poisonous.

The Escharotic method means the proper escharotics applied in the proper manner. I shall not go into details in this paper, but several have been used with success, when used in time.

It is found not to be a very difficult matter in determining by inspection whether the condition is cancerous, becoming so, or likely to become so; or what stage, whether local, regional or general—hence a proper prognosis; but even the determination of a prognosis is not essential to a cure.

Having treated quite a number of cases of cancer, during my general practice, shall mention briefly a few.

Case S.—Epithelioma of lower lip; treatment by knife; wide area excised; healed perfectly in normal time with some deformity resulting as a matter of course, but as little as the knife treatment would permit. This cancer was on a man aged sixty-seven; was growing rapidly and ulcerating in one part at time of removal, and was considered purely local. Seven years have passed with no symptoms of return.

Case R.—Cancer on right cheek rapidly enlarging and with beginning ulceration in one part. One escharotic treatment applied; total separation of diseased tissue from healthy tissue in a few days and healed normally in a few days more. No scar or depression remains—a perfect cosmetic result. Removed seven years ago; patient living sound and well; no symptoms of return.

Case P1.—Aet. 52. Began as a small growth on chin; became sore; ulceration set in; patient like nearly all others tried various medicaments with no improvement, before applying for its removal. Rapid ulceration had continued until it was larger than a dollar and extended in depth almost to the bone when patient came under my care. One escharotic application removed the growth. Six years have passed with no return.

Case P2.—A brother to the preceding case; age over sixty; cancer on back median line; dorsal region; had been treated at his home town for over a year until it became about five by seven inches in area when patient came for treatment. This cancer through its distribution of cells had ceased to be local (from size, nature and duration it was judged to be so), although there were no enlarged glands to be found, and the patient was given a proper prognosis. One escharotic applica-

tion completely removed the local growth and ulcerated condition, no scar remaining or growth ever returning at the original site. About three years later he returned, having discovered a hard, nodular, irregular mass under the skin near the anterior margin of the left axilla. The overlying skin was not in the least affected nor bulged. The diagnosis was self evident from the history and palpation, as there was not any external evidences of cancer at this time whatever. The growth was removed by the knife successfully and properly, the wound healing nicely—but the patient died six months later from secondary internal cancer, true to the original prognosis.

Case S2.—This patient had a pedunculated tumor which swung off from his body in the region of the left groin. He was told by several physicians from time to time that it was an innocent tumor and not likely to give any trouble! Consequently he nurtured it till the tumor proper weighed several pounds, to say nothing of a pedicle six or seven inches long and as large as an average sized wrist. Finally rapid canceration obtained at its distal portion. One cut, thirty stitches, and thirty minutes entirely removed it from and as close to the body as possible, healing taking place in a week—but it should have been removed years before in order to avoid any risk whatever of cancer. It probably would have been, but for the advice he got.

Many cases could be mentioned, but it is not at all necessary. These cases and this paper are designed to show the absolute necessity of not merely early diagnosis as to whether a condition is cancerous or not, but the early removal of every condition likely to become such; for while resorting to various medicaments or telling the patient you think it only an innocent affair—to wait and see if it gives any trouble, et cetera, the condition is passing every moment of delay in some degree, either from a dormant to an active, or if already active, from a local to a regional and on the way to a general distribution of cancer cells; it is also designed to show that the physician must consider the probability of cancer from the fore-runners—not delay over differential diagnosis or the question of removal until he has all the symptoms of an inoperable cancer on his hands before advising the patient that it would be advisable "to try to have it removed."

Even a layman can diagnose cancer after it is too late for any treatment to be successful; hence the important thing is early recognition of a dormant possibility; have your patients "avoid the very appearance of evil" and secure removal by proper treatment at once. Improper treatment is worse than neglect through no treatment at all.

It seems that by concerted action, thought, study, watchfulness and uniform advice to patients, more can be accomplished to eradicate this dreadful scourge from our country, by removing the very source, than we can by spending much time in a futile attempt to find a cure after an incurable stage of the disease is reached.

I find many physicians who are afraid to mention cancer, for fear of being called a "quack," or a "cancer doctor," but we should not be ashamed of any condition with which we have to contend. In order to reach many people who do not seek medical advice early enough, and to enable others to understand what is proper advice, would it not be a good plan for all county medical societies to have open meetings at stated intervals, say two or more times a year, and publicly sound warnings to the people on this and on all other medical topics of vital importance to them?

INTESTINAL DIVERTICULA.*

THEIR DISEASED CONDITION AND TREATMENT.

By L. Kirby, M. D.
Harrison.

Anatomy—Nichols diverticulum, which may be taken as the most marked type of diverticula exists as an anomaly in about 2.17 per cent. of autopsies. It is the more or less open remains of the omphalo-mesenteric duct. It always arises about ten to thirty-six inches above the ileo-cecal valve and on the ileum opposite to its mesenteric attachment.

Congenital diverticula, composed of all the coats of the intestine, are variable in size and number are found in both the small and large intestines. They are more numerous in the duodenum, where they are associated with the openings of the bile and pancreatic ducts.

Acquired diverticula are found in both small and large intestines, especially in the

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

sigmoid flexure. It is said they differ from the true diverticula, of which Meckel's is the type, in that they are usually composed only of mucous and submucous coats and the serosa, the muscular coat being absent. Good authorities say this is not true. Again they are most generally found locally between the layers of the mesentery or near the mesentery attachment of the bowels. Some authorities claim these diverticula are practically only a hernia of the mucosa into the serosa of the intestines.

Acquired diverticula vary in number from a few to as many as four hundred.

Morris' Anatomy, quoting McGrath's Surgery, says, speaking of acquired diverticula: "In advanced life and the chronically constipated, certain diverticula of mucus membrane are occasionally met with, which project through the vascular gaps of the epiploicae in this region, and also between the layers of the pelvic mesocolon. They often contain fecal concretions and may become inflamed or even perforate, forming an abscess in the left iliac fossa."

Kemp, in his "Diseases of the Stomach," says: "Probably the most common occurrence of these diverticula is in the appendices epiploicae. In many cases they are confined to them. * * * The special favoring of the epiploicae is accounted for by the fact that the point of their attachments to the gut is the place of least resistance."

Diverticula may also be found on the appendix vermiformis.

Speaking of the size of the diverticula, they may vary from the size of a millet seed to a hazel nut. Larger sizes are seldom found, for before reaching much increase in size, they ulcerate or an abscess forms, and they become detached or peritonitis supervenes.

Etiology—The great majority of diverticula are found in the old or extremely old, which indicates they are acquired. Diverticula occur about twice as often in the male as in the female sex. This would indicate undue exertion as the cause.

Obesity—A large per cent. of diverticula are found in fat people. Cough and chronic heart disease with venous back pressure are also apparently exciting causes.

Constipation, which is manifested in the large intestines because of its secular and further because the feces are more solid, also gas collecting and being confined by the solid feces, put the bowel on the stretch, which tends to weaken the muscles surrounding the mesenteric veins at the mesenteric attachment.

The fact that in the large bowel quite the intestine opposite to the mesenteric attachment would in a sense indicate diverticula were not altogether dependent upon the weakness at the mesenteric attachment. On the other hand, the natural laxity of muscular tissue in old age, accompanied with fecal and gas pressure, causes the muscles to relax, while the toxins generated from germ life and fecal stasis also tends to weaken the intestinal muscles.

The diverticula themselves cause no symptoms. The opening of the diverticula into the bowel is usually smaller than the pouch of the diverticula; hence, as feces collecting in these pouches does not readily escape congestion and inflammation are set up. Since in the small intestines the fecal contents are liquid, while in the large bowel, especially in the sigmoid, the feces are more solid, it is here we find more inflammation, either acute or chronic, also ulceration may follow, or perforation of the bowel may take place, or the inflammation may pass through all the coats of the intestine, the bacterial invasion producing peritonitis before ulceration or perforation takes place, local abscess may also occur. Adhesions of the diverticula may take place, especially to small intestines and bladder. Fistulous communications with other viscera, especially the bladder, may take place. . . .

Symptoms—Pain, tenderness, swelling, most generally in the left inguinal region. If from adhesions stenosis or impaction of feces there is partial or complete obstruction of the bowels, there is nausea, vomiting, etc.

This left-sided pain, etc., is usually accompanied with rigidity of the left rectus muscle; in fact, the symptoms of diverticulitis in its various forms are very similar to those accompanying appendicitis and its various complications, only diverticulitis is *left-sided*, as a rule.

The diverticula, on account of the retention of feces, and resultant bacterial infection, etc., are so many foci for the dissemination of toxins, which bring about the condition we are prone to call biliousness, coated tongue, aches and pains. Just as tonsils may be the focus for dissemination of toxins that produce rheumatoid-arthritis, diverticula may, at least in a measure, be foci for the dissem-

ination of toxins that bring about arteriosclerosis and allied circulatory disturbances.

Diagnosis—As has already been stated, diverticula themselves cause no symptoms. From carcinoma of the bowel in diverticula there will not likely be so much blood and mucus discharge, while there will be more fever, and an increase of leucocytes. Fallopian tube inflammation is very similar; but the tube can usually be outlined per vagina or rectum. Again, in diverticulitis and abscess of diverticulum, the pain and swelling is usually higher up in the abdomen than in diseases of the fallopian tube. Tuberculous peritonitis may need to be excluded; where the thoracic and abdominal organs are transposed a left-sided appendicitis would have to be excluded; actinomycosis might be mistaken for diverticulitis.

Treatment—Must vary as to the stage of complications, etc. Mildly acute diverticulitis: Keep patient quiet, enemas not too copious for fear the distension might rupture the weakened diverticulum—hot or cold applications to the abdomen. In abscess cases open over the site of abscess and if possible close the opening in the bowel at time of operation, drain, etc. If obstruction has occurred, as a rule on account of age, etc., resection will not be advisable; rather resort to colostomy, with the possibility of performing a secondary vivisection. In inflammation of Meckel's diverticulum, abscess, etc., connected with it, follow the same treatment as in appendicitis—usually surgical. In chronic diverticular disturbances, so many cases are dependent upon constipation, treatment is necessary. Diet has much to do with overcoming constipation, prescribe whole wheat, corn and rye bread, vegetables, with fruit after meals. Require regular habits as to evacuating the bowels. Liquid petrolatum and agar-agar may be used; enemas in moderation. In other words, the simple life.

In partial obstruction of the bowels, resulting from diverticulitis, massaging and the use of pituitrin hypodermically will at times, overcome the obstruction.

DISCUSSION.

Dr. C. H. Cargile (Bentonville): This is a very interesting subject, and a very new one. The literature on this subject is only about ten or twelve years old. Dr. Brewer, of New York, and Dr. W. J. Mayo, happened at the same time to read the first two papers in American literature on this subject, each without the knowledge of the other. I haven't any more to say than that I am a little afraid of Dr. Kirby's suggestion about massage, although there is a difference of opinion about that. This muscular coat is exposed, and, with a weakened wall of the diverticulum, massage might further spread infection, and might rupture the mucous and sub-mucous and serous coat and produce peritonitis by diffusing itself in the abdominal cavity. I believe that is a little dangerous.

Dr. Kirby, in response. A short horse is soon curried. I am glad Dr. Cargile mentioned that part about massage. I should have used the same words of caution about massage that I did about the use of enemas. I didn't do it. But, when we use pituitrin, it has an effect upon the muscular structure, and the involuntary muscle that happens to be in active use at the time is the one most apt to go to work, and the massage is absolutely necessary to some extent in order to stimulate the bowel. It is always necessary, and I should have so said; but I am glad that he mentioned the matter, because I am like Dr. Cargile. I don't think much massage would be proper and right at all, any more than I would think heavy, large enemas would be proper and right, for the same reason that he suggests. It is only to induce action in the intestines to use some massaging and force the pituitrin in that way.

CROUPOUS PNEUMONIA.*

By B. H. Hawkins, M. D.
Mena.

An acute infectious inflammatory disease of the lungs, characterized by sudden outset, beginning usually with a chill, followed by high fever, terminating by crisis or lysis on the seventh, ninth or eleventh day.

A bacterium especially prone to occur in pairs or chains known as the diplococcus lanceolatus found in about seventy-five per cent of all cases of croupous pneumonia.

The term lobar pneumonia is used for this form because it generally involves at least one lobe or a greater portion of one; a rare form of pneumonia is double pneumonia in which both lungs are involved, though not necessarily the whole of each lung.

A massive pneumonia is an inflammation not only of the air vessels but of the bronchi of the lobe or even the whole lung. A creeping or migratory pneumonia affects successively different lobes of the lung likely a streptococcic infection. Epidemic pneumonia involves large numbers or communities and seems to be contagious.

Evidently what we now know as croupous pneumonia, owing to the striking and characteristic clinical picture, which it so often presents, has been known since the earliest times, not only to the medical profession, but to the laity as well. It is prominently men-

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

tioned by the writing of Hippocrates (B. C. 460-457). Hippocrates said of it, that it was a disease quickly fatal and characterized by sputum of various colors.

Lesion and symptoms corresponding to it were described by Thucydides in his description of the plague of Athens which destroyed one-fourth its population. (B. C. 430).

Pneumonia may be regarded from two standpoints:

First: It may be a general disease with a local expression in the lungs, analagous to the inflammation of Peyers patches in typhoid fever, or it may be a local disease which like diphtheria, infects the general economy and producing the constitutional symptoms characteristic of it.

Symptoms: Perhaps no other disease, except malarial fever, is so invariably ushered in by a chill as croupous pneumonia. Almost immediately there succeeds a high fever in which the temperature rises rapidly to 103 to 104, a significant flush in each cheek is characteristic. The pulse is full and strong at the rate of 100 to 120. There is thirst, urine is scanty and highly colored. Pain in the side. The respiration rises rapidly, infrequently there is cough, expectoration of mucus at first. In twenty-four hours after the chill the sputum exhibits distinctive characteristics. It is tenacious, blood-stained or dusty colored, and ejected from the mouth with difficulty. At other times it is thinner and darker and has received the name prune-juice expectoration.

Physical signs: Physical signs of a typical pneumonia are very distinctive.

The first stage or stage of congestion, in which the air vesicles are still open, is of short duration, terminating in the first twenty-four hours. Inspection shows the face flushed, increased frequency of respiration with restricted movement upon the affected side and increased extent of motion on the sound side. Palpation at first may even find vocal fremitus diminished on account of the relaxation of the air vesicles, but it becomes decidedly increased as the latter fills up. The skin is hot and the pulse is frequent, full and strong as a rule.

Percussion obtain but slight if any, impairment of resonance; in latter part of the first, however, there is impairment of resonance. Auscultation in very earliest stage may find the vesicular murmur feeble, but very soon is heard the distinctive, physical sign of pneumonia, the crepitant rale at the end of respiration. Over the normal part of the lung there is exaggerated vesicular breathing. But all these physical signs, even if carefully sought for, may be wanting if the pneumonia be central and deep seated, as is not infrequently the case. They appear as the surface is approached or they may not be recognized at all if the disease remain central.

The second stage, or stage of red hepatization or solidification, lasting four or five days, furnishes unmistakable signs. All the signs of pneumonia to inspection in the first stage are intensified in the second, and the breathing is markedly abnormal. To palpation vocal fremitus is now intense. The skin is hot and dry, and the pulse continues frequent.

Percussion gives absolute flatness over the solidified area. Auscultation discerns high pitch bronchial breathing over the solidified lung. A lingering crepitant rale may also be heard.

The third stage, or stage of gray hepatization or resolution occupies six to ten days. It repeats largely to inspection, palpation and auscultation the phenomena of the first. Resonance continues impaired for some time. The normal manner of breathing gradually returns—the crepitant rale returns, technically known as the "crepitant redux" is finally replaced by the normal vesicular breathing sound by which time dullness has disappeared.

Pneumonia may rarely terminate in abscess or gangrene, when the signs of the second stage continue the temperature does not fall, crisis does not occur.

Modification in symptoms and special symptoms.

The foregoing is the course of a typical case of pneumonia. Perhaps 80% of all cases these symptoms suffice for a diagnosis. All of them, however, are subject to modifications. Thus the chill may be absent or imperfectly developed, in which case all the symptoms arise more gradually. The temperature, especially in old persons and debauchers, may not be nearly so high. In children it may be higher. The same is true of the respiration. Pain is especially absent in old persons—cough and expectoration also, normal or subnormal temperature.

Central pneumonia more common in the aged. There is sometimes marked jaundice.

Streptocuccus, migratory or wandering pneumonia has been mentioned as presenting clinical features different from those of ordinary croupous pneumonia. Beginning in some instances by an insidous onset, involving a part or the whole of one lobe, every three or four days spreads and involves successively different lobes, each spread is marked by a chill or chilliness, followed by an exacerbation of symptoms, usually terminating fatally.

Termination. When pneumonia terminates favorably, promptly after crisis or lysis is passed it is said to terminate by resolution, by which is meant that the inflammatory products liquifies, is absorbed or expectorated and the lung resumes its natural and normal physical features. The time at which these events are thoroughly established varies. This promptly favorable termination does not always take place. Resolution may be unduly delayed and yet ultimately take place.

Unfavorable terminations are death from cardiac failure, intestinal or fibroid pneumonia, tubercular phthisis.

Prognosis: Pneumonia is a treacherous and uncertain disease at any age, but it seems the mortality rate given by some of the best authorities of 20 to 40 per cent. is too great. It seems to me the mortality rate might be reduced on an equal to that of typhoid fever, less than 10 per cent.

In the census report of 1890 over 9 per cent of deaths were due to pneumonia; in 1900, over 10.5 per cent, according to last census report a steady increase in the mortality of pneumonia in the last forty years. On the other hand, papers have been written to show that these statistics are erroneous, and that the apparent increase has resulted from faulty returns of causes of deaths, and the misrepresentation of figures. It may be conservatively stated, however, that the number of deaths from this disease is appalling.

Treatment: A fundamental principle which experience has established is that no single plan of treatment can be recommended. The plan of treatment I offer is in a way applicable to fully 90 per cent of pneumonia.

After diagnosing the case, I try to obtain a competent nurse; if not possible to obtain a trained nurse a member of the family is instructed how to take the temperature, ventilate the room so as to furnish plenty of fresh air in the room at all times, and to maintain a uniform temperature of the room, say 70 degrees, and isolate the room.

To control the fever by cold applications to the chest and head in the form of water bottles filled with ice water, or ice cold packs to keep the fever near 101, and to keep the feet warm. The effect of the cold applications is to calm the nervous system, deepen respiration, aid expectoration, reduce fever and stimulate the heart and vascular system. It lessens the engorgment and inflammatory exudate in the lung.

The medicinal treatment consists, beginning with calomel, Dover's Powders and Bicarbonate of Soda, each 10 grains, and divided into four doses, directing one dose every two hours, and after two or three days, if the disease continues stubbornly, continue calomel, 1 grain, Dovers Powders 2 or 3 grains, to be continued every four hours. The calomel is given empirically. The Dovers Powders are given to quiet cough, allay pain and as an expectorant. Morphine given hypodermically, as needed, to ease the pain. Creosote 3 mim. in table spoonful of syrup of Acacia every four hours, or carbonate of creosote when obtainable in 15 drop doses every four hours. Watch the heart and at the first indication of weakness or irregular action give 10 grains of gum camphor in 3 c. c. of Olive Oil hypodermically. The effects of the camphor is to steady the heart, which lasts from 12 to 24 hours. Repeat as often as necessary. In stubborn and serious cases, begin with strychnine and digitalis and belladonna on the sixth day of the disease; alcoholic stimulants in the form of egg-nogg in some instances. Use serum, I have had some apparently good results from pneumo-bacteria mixed and pneumonia phylacogen.

Nourishment consists of liquid diet——buttermilk guardedly, and broths.

ENURESIS.

A New Orleans physician reports his observations in the case of a boy, 16 years old, who had been afflicted with a persistent incontinence of urin since birth. He had run the usual gamut of treatment, including a circumcision, to no avail. He was given 15 minims of pituitrin, internally, night and morning, with the result that the trouble was abated within a week and has not recurred.

Patriotism consists not in waving a flag, but in striving that our country shall be righteous as well as strong.—James Bryce.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

THANKSGIVING.

President Wilson in his Thanksgiving Proclamation makes no attempt to recount the specific things for which the nation at this time has cause to be grateful. Had he particularized doubtless he would have given the result of the Second Liberty Loan a prominent place among those things for which the nation should be thankful.

For the great result of the Second Liberty Loan campaign, with nearly 10,000,000 Americans rallying to the financial support of the nation and subscribing over four and a half billion dollars for the purchase of Liberty Loan Bonds, is a cause for deep thanksgiving in the heart of every loyal American.

President Wilson says the nation should be thankful that we have been given the opportunity to serve mankind as we once served ourselves in the great day of our Declaration of Independence by taking up arms against the tyranny that threatened to master and debase men everywhere.

So, too, can all subscribers to the Liberty Loan be thankful that they have been given an opportunity to aid in this great mission of America and have done their part toward giving to the world liberty and justice and security from the tyranny that threatens to master and debase all nations and all men.

Every purchaser of a Liberty Loan Bond has struck a blow for human liberty and for civilization and humanity. Let them remember this on Thursday, the 29th day of November, and be thankful.

ADVERTISING IN MEDICAL JOURNALS.

Trade papers are supported in their advertising columns by such trades or professions who expect returns from the class of readers subscribing to such papers. Thus, in a builders' journal we find the advertisements of those who have brick, lime, cement, lumber and other building material to sell. The farm journal is patronized in advertising by dealers in farm machinery, by poultry raisers and all others who have an especial appeal to the farmer. So it is with all trade and professional journals. But the advertiser wants to see results; otherwise he will not continue to waste his money. The old time advertiser just put in his advertisement and kept no

record of results from any particular souree. But advertising has beeome an art and a profession. Too much money is spent on it for slipshod methods to prevail .Advertisements are keyed in many eases, where eatalogs are to be sent for so that the advertiser knows at onee from which papers or magazines results are reeeived. But when speeifie artieles are advertised, without referenee to eatalogs, keying is not easy. This is partieularly true of proprietary artieles, surgieal equipment and other supplies used by physieians and surgeons. In that ease the only means they have to know whether an advertisement brings results is for the enquirer to say where he saw it. In the trade paper the profit inheres in the publisher and it is nothing to the reader whether the advertiser knows or not.

But in regard to this Journal the conditions are reversed. The Journal is not run for personal profit. It belongs to the members of the Arkansas Medical Soeiety. Without the advertising the Journal eould not exist exeept at great eost to the members. In view of this fact we urge every member who writes to an advertiser in the Journal, whether he orders anything or merely enters into correspondenee with the advertiser, never to fail to say that he saw the advertisement in the Journal. Only thus ean the advertising patronage be steadily maintained and perhaps inereased.

ARE WE JUST CUTTING OFF AND SEWING ON?

Onee an Irishman, desperately afraid of ghosts, was in the habit of pulling the sheet up over his head, thus exposing his feet to the eold. Seeking to remedy this defeet, he eut a pieee off the top of the sheet and sewed it to the bottom—but he found the sheet no longed than before.

Studying the mortuary statistics one may wonder whether medieal seienee is not doing that very thing. There has been a very marked deerease in infant mortality rates throughout the eountry—and not only as to infants but up to the years of maturity. But after middle age the statisties show an increase instead of a deercase. There are two possible reasons for this bad showing. One is that the present age lives too rapidly to attain a marked longevity. The sueeessful man of 50 today has lived longer, covered more territory, seen more than Old Parr, who lived 178 years or thereabouts—or even the champion old man, the late Methuselah himself. With our rush of business, our fast railroad travel, automobile speeding, our telegraph and telephone putting us in instant eommunieation with those at a distanee where in past generations weeks and months were required for sueh eommunieation, our intense soeial aetivities, whieh eoupled with the effort in business sueeess to keep up sueh aetivities, our love of display, our ambition to outdo our fellow man in fortune building and the eonsequent extravagance—with all these aetivities the world is living at too high pressure for long life to be possible and so we find that at 45, when a man should be at his very best, physieally and mentally, the statisties show an inerease over the past in deaths per 100,000. Of what avail is it then to save the infants and lose the men at the zenith of their usefulness?

There is perhaps another reason having nothing to do with this mad rush of the present age. That is in the faet that for many years effort has been made to save the weakling infants. Is it not possible that in this attempt to set aside the law of the survival of the fittest we are only preserving the physieally unfit, not only for themselves to fail when the stress of competition comes, but to beeome the progenators of a race of weaklings?

KEEP THE FARMER WELL.

It has been stated that the supreme need of the nation during the eoming months is an abundanee of foodstuffs. The truth of this statement is being more and more brought home to every citizen as the days go by, the eonstantly inereasing priees of food materials eonstituting reliable evidenee that the situation is beeoming aeute. One reason for this is the searcity of labor in our rieh agrieultural sections, a eondition whieh ean not be altogether relieved. Another reason, and one whieh is frequently overlooked, is the laek of effieieney in the present day worker, particularly when due to disease. It is estimated that 4 per eent of the population of eertain seetions suffer from malaria, a disease whieh lessens produetion and results in serious eeonomie loss.

"Keep the farmer well" should be a fitting slogan of the present day. There never was a time when produetion was in such need of stimulation and when able-bodied men and women were in such demand. Every ease of

malaria, typhoid fever or other efficiency reducing disease among the productive population means that the output of food is appreciably reduced and that the shortage is measurably increased. A large part of the lands in the richest sections of the South, and to a less extent in the North as well, is today partially or wholly unproductive on account of being overrun with malaria, with a consequent loss of millions of dollars. It is entirely feasible to reclaim these lands and thus increase the nation's output. In certain areas the working ability of the population has been so affected by this disease that not only is there a shortage of growing crops but also of lumber, cotton and other manufactured goods. The moving of agricultural and manufacturing hands into these districts would not materially improve the situation as the newcomers would suffer a loss of efficiency fully as great as that of the older residents. However, if co-ordinated, intelligent and well-directed effort is instituted this serious economic handicap under which we are laboring can be easily overcome. Already examples of individual accomplishment along this line are plentiful .

At Crossett, Ark., a town of 2,000 people, the United States Public Health Service, working in co-operation with the International Health Board, in one season reduced the incidence of malaria by over 80 per cent. The cost of the work was $1.23 per person, less than what one would have paid for a single visit to a physician; this, too, in one of the worst malarial districts of the country. At Lake Village, Ark., the annual financial losses sustained by people protected against malaria averaged but 23 cents per family, as reckoned from money expended for physicians and medicine and absence from work on account of sickness. In the same town the neighbors of these citizens who employed no control measures against the disease sustained an annual loss of $11.21 per family, to say nothing of the economic loss resulting from decreased efficiency. One of the progressive railroads west of the Mississippi river foresaw this problem, and appropriated funds to keep its employees free from malaria in order to maintain its working force at the top notch of efficiency. The State of Mississippi has also inaugurated active steps which will lead to an increased output from each farm and other efforts along similar lines are being made.

If this same active interest in malarial control can be extended generally this disease, which has been a severe handicap to the development of certain regions, can be checked and bumper crops produced. Tremendous opportunities in this regard are open to federations of women's clubs, chambers of commerce, civic leagues and farmer's organizations, and all such effort will be repaid a hundred fold. The principles governing malarial eradication are inexpensive, easy of application, and easily understood by any citizen of average intelligence. So important does the government consider this work, particularly in view of the necessity of cultivating every foot of ground during the coming year, that steps have been taken to have the Public Health Service prepare and distribute directions as to how it may be accomplished. Any farmer who is even remotely interested in the problem can write to the government and obtain this information free of charge.

Editorial Clippings.

"UP AGAINST IT."

True, a slang phrase, but so expressive as to leave any doubt as to meaning. Many a doctor has found himself confronted by circumstances and environments with need for prompt and energetic action so insistent that his ingenuity and skill have enabled him to rise to the occasion and become master of the situation. In the hospital, on the highway, in the home, alone in the country wilds doctors have been "Up against it," time and time again and will continue to be in the future.

We have just read of one who alone, far out of reach of professional or trained assistants, amputated a shattered arm by means of a saw and a razor, using as suture material ordinary linen thread and cambric needle. Recovery without infection resulted.

It occurred to us that it would be interesting to our readers if our members who have been "Up against it" would describe their experiences, set forth the measures employed and send them for publication. These would undoubtedly result in the imparting of ingenious methods that would enable all of us to meet our next emergency with greater equinimity and more readily master the situation. Will you present such contributions? —*Journal of the Michigan State Medical Society.*

APHORISMS.

THE PHYSICIAN.

The successful physician is the one who does honest, careful and conscientious work.

It takes politeness to get patients, and faithfulness to hold them.

A good doctor should be a good collector.

It pays to give a square deal. Money invested in medical periodicals pays better than if invested in books; one is always fresh, and the other soon becomes stale.

No one works more for the public good than does the doctor; the church not excepted.

Keep abreast of the times, as may be accomplished by reading current medical thought.

On the basis of achievement, medicine need not hide its face.

A poor practitioner carries a lean pocketbook.

A quack has fools for clients. An honest physician inspires confidence.

If a doctor keeps his office well, his office will keep him; and Franklyn said: "If a man keeps his shop well, his shop will keep him."

A studious doctor will not lag behind.

A correct diagnosis is more than half the cure.

A good character is essential to success; but a bad reputation is doomed to failure.

Don't blow your horn yourself; let others do it.

Be alert, industrious, prompt, and efficient.

"There is no excellence without great labor."

Too many doctors don't read and think enough.

A haphazard diagnosis is only guess work. Use sound judgment.

Talk less and think more.

A doctor should have clean hands, and a clean heart.

Slovenly clothes cover a slovenly doctor. Be neat, but not foppish.

Be chaste in speech, and a gentleman always.

Don't be loud-mouthed. Talk softly, yet firmly.

When entering a sick chamber, don't walk like you have on cow-hide boots. Don't rush in; but go in quietly.

Don't stick a thermometer in the mouth as soon as you get to the bedside; but wait till the flurry subsides.

Use tact, and study physical signs first. The countenance often affords a clue to the disease.

Be dignified, but not cold.

Be patient and painstaking.

Be careful, and don't write too many prescriptions, and don't order too much.

Simplify your treatment, and don't change prescriptions unless urgent. Stability is the thing.—*The Charlotte Medical Journal.*

Abstracts.

INTESTINAL TOXEMIA.

G. R. Satterlee and W. W. Eldridge, New York (Journal A. M. A., Oct. 27, 1917), have studied the symptomatology of the nervous system in chronic intestinal toxemia. For the purpose of simplifying the subject, they separate it into four classes, namely, cases involving (1) the mental system, (2) the sensory system, (3) the motor system, and (4) the sympathetic system. These classes of symptoms may occur separately, or in combination, usually the latter, so that we can designate them only according to the predominant symptoms. It would be impossible to say why the toxin resulting from these intestinal conditions should have a selective affinity for any one part of the nervous system, just as it is impossible to ascribe reasons for the localization in other toxic states resulting from tuberculosis, diabetes, gout and syphilis. It is significant, say the writers, that practically all cases here considered are cleared up or markedly improved as regards the nervous manifestations by treatment directed toward the intestinal toxemia. They say, also, that there is no group of mental symptoms characteristic of intestinal toxemia. They report a number of cases of different types with comments. They have observed that, as a general rule, patients in whom sensory symptoms predominate are those of phlegmatic disposition, while those in whom mental symptoms are likely to occur are highly temperamental. Other cases

show other symptoms, such as convulsions, and one is reported with postmortem findings. The connection between intestinal conditions and disturbances of the ductless glands is often highly problematic. Constipation may be either the cause or the result of the toxemia. In cases with these ductless glands symptoms, only occasional improvement has followed the administration of organotherapeutic products. On the contrary, the symptoms due to the perversion of the glands have been improved by treatment directed to intestinal conditions. The writers sum up their general conclusions as follows: "The nervous system is almost invariably affected in whole or in part by chronic intestinal toxemia . The nervous symptoms are often the most prominent in the symptomatology. A thorough investigation of the gastro-intestinal tract is essential in cases exhibiting a chronic symptomatology of the nervous system, provided the usual obvious factors of etiology of disturbances of the nervous system can be excluded. Disturbances of the gastro-intestinal system are more often the cause of a nervous symptomatology than the result of a diseased nervous system. In doubtful cases a proper hygiene and therapy of the intestinal tract will often be the deciding factor in differential diagnosis."

VENEREAL DISEASE AND THE ARMY.

The question as to how venereal diseases may affect the army and the country generally is taken up by William Lyster, Washington, D. C. (Journal A. M. A., Oct. 13, 1917). These diseases constitute the greatest factor producing noneffiecieney in armies in training and the danger to the national health through the spread of these diseases is most important. He gives a chart illustrating the history and annual admission rate for these diseases in the United States Army from 1888 to 1915. The first age, from 1888 to 1898, covering the decade in which the army was scattered in small detachments over the country and the majority of the officers and privates were professional soldiers. For the bulk of the troops the contact with cities and towns was casual and not daily. The Wassermann reaction and the cause of syphilis were not known and as in civil life many cases appeared under other names, such as rheumatism, heart disease, etc. Also, no systematic campaign to reduce the amount of venereal disease was undertaken. Aside from indefiniteness in diagnosis and its effects, the average admission rate of the decade could be taken as 78 per 1,000. In the second decade from 1898 to 1908, radical changes occurred. The isolation of the old Army in the West was passed. Many old soldiers dropped out. New and untrained material was brought in, much of it being taken away from home ties and control. Intercourse with cities and populous regions increased. The tropics were penetrated. The writer illustrates the growth of venereal disease with a chart which indicates the rates for the Army both in the United States and in the new tropical dependencies. Porto Rico, Cuba and the Philippine Islands. This chart affords a comparison between the rates for the Army at home and those for the Army in the dependencies. The conditions encountered in the tropics make the difference between the two sets of rates. Lack of regular physical examinations and systematic propaganda against venereal disease characterize the second period as well as the first. The rates for the second period, which had steadily mounted until they almost double the recorded rates of the first decade, were so preposterous that attention was concentrated on them, because these diseases produced a noneffiecieney which, during several years, was about equal to that produced by the five diseases next in order of frequency. Individual spasmodic efforts to remedy conditions were made by the post surgeons whose work was studied by the Surgeon-General's office. Gradually a systematic campaign was developed, the good results of which appear in the third period, and were made possible by scientific progress in the knowledge of these diseases. From 1909 to 1911, the principle of preventive medicine began to be applied and bore fruit. The introduction of the Wassermann test and vaccine in the treatment of gonorrheal arthritis are outstanding features of this period. The Wassermann test tended to give an increase in ratios. The system of recording cases was still more marked in 1912, when fortnightly physical examination was ordered. The rate for the entire Army in 1912 is shown to have fallen nearly forty points for two years. Inspection, prophylaxis, loss of pay for disease not in line of duty are prominent features of this period. The chart indicates that the period from 1910 to 1913 is characterized by the creditable work of the medical department of the Army . In the new Army, higher rates will probably prevail for some time, but hope for better things

is backed by knowledge that we have the means, if we can only apply them, of controlling this great producer of nonefficiency. The education of the new medical officers, on whom devolves a great responsibility, is the first condition of success, and the education of the line officers and the men is another important requirement.

Personals and News Items.

Dr. E. E. Pickens of Rogers has moved to Kansas City, Mo.

Dr. A. A. McKelvey has moved from Rogers to Fort Smith.

Dr. J. H. Smith has moved from Magnet to Hot Springs.

Dr. C. E. Bennefield has moved from Charleston to Conway.

Dr. J. V. Falisi, Lt. U. S., of Little Rock, is located at Camp Sheridan, Chillicothe, Ohio.

Dr. and Mrs. L. D. Reagan have returned from Chicago.

Dr. and Mrs. E. T. Bramlit of Malvern have returned from Kansas City and Chicago.

Remember, those boys in France are YOUR boys. Do YOUR bit in saving food and they will get THEIR bite.

Major F. Vinsonhaler, Major W. A. Snodgrass, Dr. J. P. Runyan and Dr. Nolie Mumey have returned from Chicago.

Drs. Oscar Gray and W. A. Lamb have moved their offices from the Boyle Building to the Donaghey Building, Little Rock.

Dr. J. H. Lenow, Little Rock, has been appointed surgeon of the First Regiment of the Pulaski County Guards. Dr. Lenow is to have the rank of major.

Governor Brough announces the appointment of Dr. C. M. Lutterloh of Jonesboro a member of the State Board of Health to succeed Dr. B. A. Fletcher of Augusta, who died in Memphis November 15.

During October the Arsenobenzol (Dermatological Research Laboratories, Philadelphia Polyclinic) was accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies. Arsenobenzol is sold by the General Drug Co., New York.

Major George W. Crile of Cleveland, in command of Lakeside Hospital unit in France, returned to America in October to attend the Clinical Congress of Surgeons and to attend to War Department business. He will return to France soon.

Dr. C. S. Pettus, Little Rock, read a paper last month at the Southwestern Medical Association, Kansas City, on "What the Superintendent of Hospitals Means to the Advancement of Scientific Medicine."

Dr. T. J. Stout of Brinkley; Dr. J. C. Blackwood of Harrison; Dr. J. M. Jelks of Searcy; Dr. E. F. Ellis, Fayetteville, and Dr. J. T. Clegg, Siloam Springs, visited in Little Rock this month.

Our issue next month will contain an article on "Present Methods in Military Surgery," by Lt. Guy O. Shirley, M. O. R. C., U. S. A., "Somewhere in France." Lt. Shirley is a Little River county boy, son of Dr. W. L. Shirley of Foreman.

Dr. A. C. Shipp, professor of pathology and bacteriology, University of Arkansas, has gone in partnership with Drs. Anderson Watkins and Sterling P. Bond, and has opened offices in the Donaghey Building, Seventh and Main streets, Little Rock.

A new antiseptic which is attracting much attention and which has recently been introduced by Dr. H. D. Dakin of the Herter Laboratory, New York, is Toulene-para-sulphondichloramine, or as it is commonly known, Dichloramine-T. This antiseptic is used in oil solution, either as a spray or as a direct application.

The death rate from lobar pneumonia is not showing improvement from year to year as is the case with most of the other infectious diseases. The year 1916 was an especially bad one for this disease, the rate having increased very perceptably over the preceding four years. The very severe grippe epidemic which prevailed in 1916 may have had some bearing upon this result.

Word received from the Surgeon General of the U. S. Army, conveys the information to officers of the Medical Reserve Corps of the United States Army, inactive list, that assignment to active duty may be delayed, and that they are advised to continue their civilian activities, pending receipt of orders. They will be given at least fifteen days' notice when services are required.

The action of the quorum court of Jackson county, in appropriating $750 to help provide for a public health nurse for that county, is a step that should be taken by every county in the State. While the public health nurse is to do everything possible to improve health conditions of the county, she will also aid in a vigorous fight against tuberculosis, under the direction of the Arkansas Public Health Association.

To assist communities in making their milk supply safe, the United States Department of Agriculture has issued a "Guide for Formulating a Milk Ordinance." This document, Department Bulletin 585, suggests a form of ordinance designed to protect the community against fraud and disease and to insure cleanliness in the production and handling of milk. Health officers and physicians interested in improving milk supplies may obtain it free on application to the department..

"Attention of all county medical society secretaries is called to the new ruling of the postal authorities (Sections 640 and 641 of Postal Laws and Regulations) to the effect that all publications must bear full address of subscriber, including name of street and number or office building, and unless such publications are completely addressed they will be classed as unmailable matter. Therefore, in sending in dues for the new year, which are due on or before January 1, county secretaries must give complete street address or office building number for all physicians in towns or cities having free delivery, or otherwise such physicians will not receive THE JOURNAL."

The secretary of your County Medical Society will be after your dues next month.

At a recent meeting in Chicago of the State Committees of the National Council of Defense, it was decided to petition Congress to create a Reserve Medical Officers Reserve Corps. When this is created, every qualified physician at any age will be given the opportunity and honor to volunteer his services and be enrolled. After this every physician will be in a position either to wear the insigna of honor of the Reserve Medical Officers Reserve Corps, or the uniform of active service in the Medical Officers Reserve Corps.

From the new Reserve Medical Officers Reserve Corps the Surgeon-General will be able to select medical officers as they are required for service in France or at home.

The present great problems are: The training of physicians in civil practice for military duty.

The protection of the army in training in this country from venereal infection.

The future great problem when our wounded begin to return to this country will be the reconstruction and re-education of the crippled soldiers.

The great and only necessity of the present is the successful carrying on of this war.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas Physicians commissioned in the Medical Reserve Corps published in the September and October issues, the Surgeon General reports:

Paschal Josephus Park, Cabot, 1st Lieut.
Walter H. Bruce, El Paso, Major.
Bert Cecil Hiner, Evansville, 1st Lieut.
Fred Raines Morrow, Green Forest, 1st Lieut.
John Royston Brown, Mansfield, 1st Lieut.
R. Newman Brown, McGehee, 1st Lieut.
John Short Jenkins, Pine Bluff, Capt.
Martin Van Buren Waddle, Success, 1st Lieut.
Oscar Aden Jamison, Tuckerman, 1st Lieut.

DUTIES OF THE COUNCIL.

Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expenses in attending the annual session of the Association. —Chapter VIII, Sec. 2, Constitution and By-Laws of the Arkansas Medical Society.

WAR SESSION OF THE CLINICAL CONGRESS.

The Clinical Congress of Surgeons of North America, in its eighth annual session at Chicago, was a war session. The clinics of each day, held in the various hospitals, were in

large part devoted to demonstrations of war methods, of the new antisepties, of the new treatment for war burns, and the handling of eases of shoek. But the outstanding features were the afternoon and evening sessions. These brought home to the auditors the imminenee of Ameriea's aetive partieipation in the war. Many of the audienee were in uniform—on aetive duty—and on the speakers' rostrum at eaeh session sat representatives of the medieal departments of our Allies, Franee and Britain, and the Surgeon-General of our own governmental departments. At the opening session, Monday evening, the medieal profession responded with repeated outbursts of the greatest enthusiasm to the patriotic utteranees of the noted speakers. Even the most doubtful skeptie would have been eonvineed at that session that the American medieal profession is in the war wholeheartedly, and resolved to do its "best" rather than merely its "bit." The greatest outburst of all oeeurred with the annouueement that 18,000 physieians have offered their serviees, without eonseription, to the government, and that speeial eonseription of the medieal profession would not be needed. Meetings of this eharaeter give to those who attend a perspeetive as to the stand whieh the medieal profession is taking on problems of the day; at this time, partieularly, they give a stimulus to all as to the need of eomplete and hearty eo-operation with the government in the ordeal whieh it faees; above all, they stimulate in eaeh individual a spirit of self-saerifiee and willingness to "do his bit." This is the greatest serviee whieh organizations may render to their members and to the publie, and that this is reeognized is evident from the statement of Surgeon-General Gorgas that organized medieine has given more aid than any other eivilian ageney to Ameriea's sueeessful aetivities thus far in the war.—*Journal A. M. A.*

ACTION OF THE STATE COMMITTEES OF THE MEDICAL SECTION, COUNCIL OF NATIONAL DEFENSE.

Urging Immediate Aetion Providing for at Least Six Months of Intensive Military Training of All Young Men in Their Nineteenth Year, to Beeome Operative as Soon as the Army Cantonements are Available; also reeommending Physieal Training in Sehools, Ete.

The following resolutions were adopted unanimously at a meeting of Committees from all states (exeept Maine and Delaware), held in the Congress Hotel, Chieago, Oetober 23, 1917:

Whereas, The experienee through whieh the United States is now passing should eonvinee every thoughtful person of the neeessity for the universal training of young men, not only for the national defense in ease of need, but also to develop the nation's greatest asset—its young manhood—in physieal strength, in mental alertness, and in respeet for the obligations of eitizenship essential to demoeraey; Therefore Be It

Resolved by the State Committees of the Medieal Seetion of the Counеil of National Defense that they strongly urge the adoption by our government at this time of a eomprehensive plan of intensive universal training of young men for a period of at least six months, upon arriving at the age of nineteen years; and that this body also support the movement to seeure the introduetion into publie sehools of adequate physieal training and instruetion;

Resolved, That the members of eaeh State Committee immediately take aetive steps to insure publie support for the subject of these resolutions through the newspapers, through publie meetings and through the appointment of eommittees in eaeh eounty; also that eopies of these resolutions be forwarded to the Senators and Members of Congress in their respeetive states, with a personal request that favorable aetion be taken at the eoming session of Congress upon a measure following the prineiple of the Chamberlain Bill and to beeome operative as soon as the army eantonements are no longer required for the training of the forees in the present war;

Resolved, That eaeh State Committee from time to time report to the Medieal Seetion of the Counеil of National Defense as to aetion taken and progress seeured in their several states.

New and Nonofficial Remedies.

CAMIOFEN OINTMENT.—An ointment obtained by mixing ioeamfen (a liquid obtained by the interaetion of iodin 10, phenol 20 and camphor 70 parts) with an equal weight of a lard-wax-oil of theobroma base, but eontaining nearly all of its iodin in the eombined

form. It has the properties of fatty iodin compounds, phenol and camphor, and is used in skin diseases. Schering and Glatz, New York (Journal A. M. A., Oct. 20, 1917, p. 1343,.

Halazone-Abbott.—Parasulphonedichloramidobenzoic acid. It is said to act like chlorine and to have the advantage of being stable in solid form. In the presence of alkali carbonate, borate and phosphate it is reported that halazone in the proportion of from 1:200,000 to 1:500,000 sterilizes poluted water. Halazone is used for the sterilization of water in the form of Halazone tablets, each containing 0.004 Gm. halazone mixed with sodium carbonate and sodium chloride. The Abbott Laboratories, Chicago (Journal A. M. A., Oct. 6, 1917, p. 1166).

Propaganda for Reform.

The Active Principle of the Hypophysis.—Despite the suggestion obtained from certain advertising claims, the active principle of the pituitary gland has not been isolated in a pure state. An examination of commercial preparations showed that proteoses and possibly peptones were present in all. (Journal A. M. A., Oct. 27, 1917, p. 1431).

Some Misbranded Nostrums.—The following "patent medicines" have been declared misbranded under the U. S. Food and Drugs Act: Sherman's Compound Prickly Ash Bitters, containing 20 per cent. alcohol, buchu and an emodin bearing drug: "Thorn's Compound Extract of Copaiba and Sarsaparilla," a mixture of copaiba and sarsaparilla extract; "Tarrant's Compound Extract of Cubebs and Copaiba," a mixture of copaiba and cubeb extract; V. I. G., an aqueous solution of glycerin, morphin, berberin, hydrastin and salicylic acid. (Journal A. M. A., Oct. 20, 1917, p. 1374).

Ziratol.—The Council on Pharmacy and Chemistry reports Ziratol, sold by the Bristol-Myers Company, New York, ineligible to New and Nonofficial Remedies, (1) because its composition is secret, (2) because the phenol coefficient is not stated on the label, (3) because its use by the public as a "vaginal douche" is advised, and (4) because the claim that Ziratol is the "universal disinfectant" is unwarranted. The A. M. A. Chemical Laboratory reported that the preparation is a soap solution containing alpha-naphthol as its essential constituent. (Journal A. M. A., Oct. 6, 1917, p. 1191).

Haines' Golden Treatment.—This is sold by the Golden Specific Co., Cincinnati, O., as a cure for the liquor habit, which may be administered without the knowledge of the patient. The directions which accompany the three-dollar package imply, however, doubt as to the possibility of success unless the patient is anxious to be cured of the habit and takes the powders knowingly. The A. M. A. Chemical Laboratory reports that this worthless nostrum consists of powders which are composed essentially of milk sugar, starch, capsicum and a minute amount of ipecac. (Journal A. M. A., Oct. 27, 1917, p. 1460).

Hepatico Tablets.—The Council on Pharmacy and Chemistry reports that Hepatico Tablets (David Laboratories, Inc.) are claimed to "contain a combination of bile salts, pepsin, pancreatin, ext. nux vomica and cascara," and that in their exploitation the same therapeutic nonsense is made use of as that used in connection with two preparations of similar claimed composition, namely, Veracolate and Taurocol, previously reported on by the Council. The Council declares the therapeutic claims made for Hepatico Tablets unwarranted, the name objectionable and the combination of ingredients irrational. (Journal A. M. A., Oct. 20, 1917, p. 1374).

Gonosan.—The Council on Pharmacy and Chemistry reports that Gonosan, sold by Riedel & Co., Inc., is in the form of capsules said to contain oil of sandalwood and flava resin, advertised for the treatment of gonorrhea (as indicated by the name). It declared Gonosan inadmissible to New and Nonofficial Remedies because the therapeutic claims are exaggerated; because there is no evidence that the combination of kava resin with oil of santal is superior to oil of santal alone, and because the therapeutically suggestive name is conducive to indiscriminate and unwarranted use of the combination both by the profession and by the public. (Journal A. M. A., Oct. 13, 1917, p. 1287,.

Some Misbranded Nostrums.—The follow-some nostrums have been the subject of prosecution by the federal government under the Food and Drugs Act: DeWitt's Eclectic Cure, containing alcohol, opium and ether; DeWitt's Liver, Blood and Kidney Cure, es sentially a water-alcohol solution bearing a

cathartic drug, together with Epsom salt, nitrates and iodids; Lightning Hot Drops, containing 60 per cent. alcohol and 48 drops of chloroform to the ounce, as well as ether and capsicum; Mother's Salve Mother's Remedy, a salve consisting of petrolatum, with some glycerin, potassium chlorate and oils of cloves, cinnamon, eucalyptus, sassafras and pine or juniper; Raney's Blood Remedy, a solution of potassium iodide and mercuric chloride in syrup of sarsaparilla with 16 per cent. alcohol; Rattlesnake Oil Liniment, White Eagle Indian Rattlesnake Oil Liniment, containing little or no "rattlesnake oil"; Rosadalis, essentially a water-alcohol solution containing potassium iodide and a cathartic drug. (Journal A. M. A., Oct. 6, 1917, p. 1192).

ALCRESTA IPECAC.—This preparation of ipecac was admitted to New and Nonofficial Remedies in 1915. Recently claims have been advanced for this preparation which were not contemplated at the time of its acceptance and which appeared improbable and unwarranted in the light of the known properties of ipecac. The Council on Pharmacy and Chemistry brought these extravagant claims to the attention of Eli Lilly & Co., the proprietors of Alcresta Ipecac. This preparation is ipecac was admitted to New and Nonofficial Remedies in 1915. Recently claims have been advaneed for this preparation which were not contemplated at the time of its acceptance and which appeared improbable and unwarranted in the light of the known properties of ipecac. The Council on Pharmacy and Chemistry brought these extravagant claims to the attention of Eli Lilly and Co., the proprietors of Alcresta Ipecac. As Lilly and Co. would neither discontinue nor modify these claims and did not submit any evidence to warrant them, the council announces that it has been obliged to delete this proprietary from New and Nonofficial Remedies. (Journal A. M. A., Oct. 20, 1917, p. 1373).

Married.

BOND-KITCHENS.—The marriage of Dr. Sterling P. Bond of Little Rock, to Miss Mary Kitchens of Denver, took place in Denver, on Monday, October 24, 1917.

THOMAS-WALLS.—Dr. P. E. Thomas, Jr., of Clarendon, and Miss Louise Walls of Holly Grove, were married October 28, 1917, at Holly Grove. Dr. and Mrs. Thomas have gone to Alexandria, La. Dr. Thomas is stationed at Camp Beauregard.

GOLDSTEIN-PAHOTSKI.—The marriage of Dr. Davis W. Goldstein, Lt., M. R. C., Fort Smith, to Miss Florence Pahotski, of Fort Smith, took place at the home of the bride November 11, 1917. Dr. and Mrs. Goldstein have gone to Atlanta. The doctor is located at Camp Gordon.

Obituary.

DR. BURRELL A. FLETCHER.—Dr. B. A. Fletcher of McClelland, Woodruff county, died November 15, St. Joseph's Hospital, Memphis. Age 55. Dr. Fletcher was president of the Arkansas State Board of Health. Surviving are his wife and the following children: Mrs. D. C. Long, Mrs. Franees Butler, Alexander, Susie and Lucie Fletcher.

Book Reviews.

ROENTGEN TECHNIC (DIAGNOSTIC).—By Norman C. Prince, M. D., Omaha, Nebraska. Seventy-one original illustrations. Published by C. V. Mosby Company, St. Louis, Mo., 1917. Price $2.00.

The book is particularly intended for those general practitioners who have seen fit to install X-Ray equipment in helping them to best care for those who come under their observation.

PHYSICAL EXERCISE FOR INVALIDS AND CONVALESCENTS.—By Edward H. Oeshner, B. S., M. D., F. A. C., Chicago. Illustrated. Published by C. V. Mosby Company, St. Louis, Mo., 1917. Price $0.75.

This compact manual clearly describes forty exercises which may be executed without apparatus in the patient's own room, at any time convenient to the patient. While the exercises are designed for invalids and convalescents they will be found of unusual benefit to those engaged in sedentary occupations.

A TEXT-BOOK OF FIRST AID AND EMERGENCY TREATMENT.—By A. C. Burnham, M. D., Medical Corps, U. S. R. New York. Illustrated with 160 engravings and two plates. Published by Lea & Febiger, Philadelphia, 1917. Price $2.00.

This volume has been made complete in many small details, so the advanced worker may find it a reliable reference book for both field and hospital duty, and a camper and yachtsman, in the absence of a physician, may

find in it sufficient information to enable him to assume temporary care of the sick and injured.

THE TREATMENT OF EMERGENCIES.—By Hubley R. Owens, M. D., Surgeon to the Phila. General Hospital; Asst. Surgeon to the Phila. Orthopedic Hospital and Infirmary for Nervous Diseases; Chief Surgeon to the Phila. Police and Fire Bureaus; Asst. Surgeon Medical Reserve Corps, U. S. Navy. 12mo volume of 350 pages with 246 illustrations. W. B. Saunders Company, Philadelphia, 1917. Cloth $2.00 net.

Dr. Owens has written this book primarily for the instructors of first aid to the injured, for police and fire surgeons, for ambulance surgeons, for resident surgeons, for nurses and for those laymen who wish to become well versed in the treatment of emergencies.

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D., Philadelphia, Pa. Volume XX, No. 3. September 1, 1917. Published by Lea & Febiger, Philadelphia, Pa. Price $6.00 per annum.

This volume contains: "Diseases of the thorax and its viscera, including the heart, lungs and blood vessels," by William Ewart, M. D., F. R. C. P.; Dermatology and Syphilis," by William S. Gottheil, M. D.; Obstetries, by Edward P. Davis, M. D.; "Diseases of the Nervous System," by William G. Spiller, M. D.

THE SURGICAL CLINICS OF CHICAGO—Volume 1, Number III (June, 1917.) Octavo of 231 pages, 70 illustrations. Philadelphia. W. B. Saunders Company, 1917. Published bi-monthly. Price per year: Paper, $10.00; cloth, $14.00.

In this number we find descriptions of twenty-one clinics. Dr. Vernon C. David presents a clinic at the Presbyterian Hospital on "Local Anesthesia for Hemorrhoidectomy." Summary of the clinic as follows: Technic of infiltration, extradural and parasacral anesthesia—advantages and disadvantages of each method; removal of hemorrhoids with clamp and cautery; the after-treatment; results in 150 cases.

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., Philadelphia. Volume II, June, 1917. Published by Lea & Febiger, Philadelphia. Subscription price, $6.00 per annum.

In this volume will be found instructive articles on hernia; surgery of the abdomen, exclusive of hernia; gynecology; diseases of the blood; diabetic and metabolic diseases; diseases of the thyroid gland; spleen; nutrition; lymphatic system, and ophthalmology. Under "Surgery of the Abdomen," Dr. C. A. Gerster of New York writes on "Gun shots of the abdomen in war." In wounds of the kidney, Dr. Gerster says: "No patient should be allowed to leave the table after nephrectomy for secondary hemorrhage from the kidney without the surgeon assuring himself that there is no blood-clot in the bladder and that the bladder is empty."

THE PRACTICAL MEDICINE SERIES.—Comprising ten volumes on the Year's Progress in Medicine and Surgery. Under the general editorial charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis of the Northwestern University Medical School. Series 1917.

VOLUME II, GENERAL SURGERY.—Edited by Albert J. Ochsner, M. D.. Price of this volume $2.00.

VOLUME III, EYE, EAR, NOSE AND THROAT.—Edited by C. A. Wood, M. D.; A. H. Andrews, M. D., and G. E. Shambaugh, M. D. Price of this volume $1.50.

VOLUME IV, GYNECOLOGY.—Edited by E. L. Dudley, M. D., and S. S. Schochet, M. D. Price of this volume is $1.35.

VOLUME V, PEDITATRICS.—Edited by I. A. Abt, M. D., and A. Levinson, M. D. ORTHOPEDIC SURGERY.—Edited by John Riddley, M. D., and Charles A. Parker, M. D. Price of this volume is $1.35.

VOLUME VI, GENERAL MEDICINE.—Edited by Frank Billings, M. D., and B. O. Raulston, M. D. Price of this volume is $1.50.

Price of the series of ten volumes $10.00.

This series is published primarily for the general practitioner, at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

"NOSTRUMS FOR KIDNEY DISEASE AND DIABETES.—Prepared and issued by The Propaganda Department of The Journal of the American Medical Association. 47 pages; deals with 34 nostrums; illustrated. American Medical Association, 535 North Dearborn St., Chicago. Paper, 10 cents postpaid.

This is the latest pamphlet issued by the Propaganda Department of The Journal of the American Medical Association as part of its work in giving the medical profession and the public the facts regarding different phases of the nostrum evil and quackery. Nostrums for kidney disease and diabetes are grouped together in one pamphlet, not because there is any essential relation between diabetes and kidney disease, but because the average quack makes no distinction between the two conditions and recommends his nostrum indiscriminately for both. It is not necessary to tell physicians that drugs will not cure either kidney disease or diabetes but it is necessary to apprise the public of this fact. Whatever justification there may be for the sale of home

remedies for self-treatment, there is no excuse, either moral or economic, for selling preparations recommended for the self-treatment of such serious conditions as diabetes and kidney disease. Every "patent medicine" sold for the cure of these diseases is potentially dangerous and inherently vicious. The pamphlet is an interesting and instructive one to put in the hands of the layman.

THE RESTORATION TO FAVOR OF CREOSOTE.

Creosote has been employed by physicians with varying success for many years in the treatment of bronchitis, especially the bronchitis of pulmonary tuberculosis.

Unfortunately, because of its disagreeable odor and taste, because it caused gastric irritation and distress, nausea and even vomiting, most clinicians were forced to abandon its use. For these reasons creosote is now rarely prescribed. It has fallen into disuse, even though it is admitted that it is possessed of therapeutic value.

A NEW CREOSOTE PRODUCT.

Calcreose (a chemical combination of calcium and creosote, containing 50% creosote) very largely overcomes the objections to creosote.

Like creosote, Calcreose will allay cough, lessen expectoration and lower the temperature.

Like creosote, Calcreose improves digestion and nutrition through intestinal antisepsis and stimulation.

Like creosote, Calcreose is a stimulating expectorant.

Calcreose is not a germicide, but it checks bacterial activity, checks putrefaction, lessens the production of toxines—hence reduces the toxemia always associated with intestinal infections.

Like creosote, Calcreose is possessed of all these good qualities but, unlike creosote, Calcreose is practically devoid of all objectionable features.

In other words, Calcreose is an agreeable form of creosote medication, and when given in small doses at first, gradually raised to tolerance, it is free from untoward effects.

As high as 120 grains of Calcreose has been given daily without digestive disturbance.

COMPARATIVELY INEXPENSIVE.

Unlike many creosote compounds, Calcreose is comparatively inexpensive. A thousand 4 grain tablets costs the physician or druggist $3.00.

Calcreose is made by The Maltbie Chemical Company, Newark, New Jersey, and is advertised elsewhere in this issue of the Journal.

HANDS—ROUGH—REMEDY FOR.

Physicians whose hands are dipped often in antiseptic solutions, or rough and hard, will appreciate the following:

Olei rosae, gtt. x.
Glycerin, ℥j.
Bay rum, ℥iij.
Olei cajuputi, gtt.xx.

M. et Sig.—Rub the hands each night with great regularity and during day before going out in the air.—D. L. Field.

YOUNG PHYSICIANS, YOUR OPPORTUNITY.

Never again in the history of medicine in this country will such an opportunity be afforded you to serve your country as well as the best interest of yourself.

The experience which you will gain by being commissioned in the Medical Reserve Corps and seeing active service, will be worth more to you in a professional way than you could accomplish in years of practice in civil life.

The pay granted to officers in the Medical Reserve Corps is sufficient not only to cover all needs, but enable you to lay aside a comfortable balance, and while the older men in the profession have come forward, it is to the younger men that the greaetst benefits accrue.

The experience will prove broadening both professionally and mentally. With this experience and the thought that you have served your country in time of need, you will return to civil life and receive the further benefits from your patients, friends and acquaintances, always accorded to one who has been so prominently individualized as this opportunity will afford you.

The editor of this Journal will be glad to send you an application blank for a commission in the Medical Reserve Corps.

Have you done your share to help the Red Cross? It is the greatest organization ever devised by the mind of man to relieve the distresses of humanity.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. Little Rock, Ark., December, 1917. No. 7.

Original Articles.

RED CROSS ACTIVITIES.

By Mr. Alfred Fairbank,

Division Director, Civilian Relief, Southwestern Division, American Red Cross, St. Louis.

Every physician will be interested in the plan of the American Red Cross for the care of families of enlisted men. Each of the thirteen divisions of the American Red Cross has a Division Director of Civilian Relief corresponding to the Director-General of Civilian Relief at Washington. The Southwestern Division is composed of Missouri, Arkansas, Texas, Kansas and Oklahoma, with headquarters at St. Louis.

Each Red Cross Chapter has appointed a Home Service Section of the Committee of Civilian Relief and it is the duty of this section to see that no soldier's or sailor's family suffers because a member of it has gone to the front. These Sections are rapidly qualifying themselves to give advice and counsel, and, if necessary, financial assistance. They are usually made up of seven members and very often a physician is asked to serve as one of the members. Chapters are not asked to assist financially unless the separation allowance made by the Government and the man's allotment of part of his pay is not sufficient to provide for the family, when the Chapters are asked to make up the deficit out of the Chapter's funds. The Government War Insurance Bill is only compulsory in regard to the man's wife and children. Often a soldier will have to be induced to make allotments for his other relatives when they are in need.

There are many opportunities of service that are not financial, such as advice about schooling of children, health of children, health of mother, securing positions for children becoming of working age, attending to legal matters, etc.

These types of cases will show some forms of service:

Case One—Mother with daughter twenty-five, son twenty-two and daughter thirteen. Son is drafted. Mother is taken dangerously ill, without hope of recovery. Oldest daughter must resign her position, paying $35 per month, to nurse mother. The soldier's allotment of $30 only income.

Home Service Section investigated, found an excellent family never in want before, now in dire straits, and needing great assistance. Chapter made a grant of $10 a week to provide finances for living expenses, medicine, doctor bills, etc., and are making encouraging calls to the family and assisting the daughter in nursing her mother. Financial relief alone would not have been enough in this case.

Case Two—Man enlisted in army and married in June, 1917, asked for discharge in October on the grounds of a dependent wife who was an expectant mother. Army officials refused discharge because marriage took place after declaration of war. Woman has no relatives and soldier's relatives, who live in another part of the United States, are unable to assist.

Home Service Section found facts as stated correct, made arrangements for the wife's confinement, assigned a big-hearted, motherly woman as counselor for her, and assisted her with additional funds necessary over and above the soldier's allotment. This was splendid Home Service for it comforted an expectant mother and by the same effort relieved the worried mind of the soldier father.

Case Three—An aged father and his wife had two sons, twenty-five and twenty-two years of age, respectively. The older boy was drafted. Two weeks later the second boy was taken ill suddenly and died. The old folks were distracted, not only because of the loss of both sons, but because they had a growing crop, their only means of support, without any one to gather it.

Home Service Section marshalled the neighboring farmers, gathered the crop, helped to market it, and gave kindly advice and assistance to the old people. That was all that was needed, but it was good Home Service.

Case Four—Referred by Canadian Patriotic Fund. American citizen enlisted in Canadian forces, leaving a wife and four children in United States. Man formerly earned $150 per month and took excellent care of his family. He made an assignment of $20 of his pay; the Canadian Government made an additional separation allowance of $20, total $40 per month. Woman willing to re-adjust her mode of living, but to drop from $150 per month income to $40 per month, was impossible without great sacrifice to health and environment of children.

Home Service Section investigated, found an excellent family and enthusiastically recommended grant of $10 per month to be added to the $40. This was enough to relieve this woman of the constant worry and fear which was rapidly driving her to a neurotic condition. There will be many more cases like this for the Red Cross.

Case Five—Referred by Commandant of Army Post. Soldier had deserted and when re-captured, gave as his excuse that the fear of his wife and three children starving in Chicago, drove him to it.

Home Service investigation showed man well known to all charities of Chicago because of his absolute failure to support his family and his frequent desertion and long absence from them. Soldier compelled to make an allotment of $20 per month for their support, and at wife's request (this being her first dependable income from him), man was kept in the army. Our Home Service Report helped the Commandant, too, for he no longer felt like a brute in handling this "poor man" and began at once to make a real man out of this soldier.

Other examples might be given to show the need of safeguarding women and children from harmful labor, arranging for proper housing and necessary medical attention, protecting lonely and inexperienced young wives, securing the best legal advice and other needs of vital importance to a normal family life.

Every physician can feel assured that the Red Cross Chapter of his community will be interested in every family of a soldier or sailor that may be in need of any of the forms of service which the Home Service Section of the Chapter is prepared to give. Many physicians will see in this Red Cross activity an opportunity for service that will go far to keeping the rising generation protected and safe until they are ready and competent to take their places in the world's activities.

PRESENT METHODS IN MILITARY SURGERY.

By M. le Medecin, Aide-Major, 1''Cl., Claude Bernard.

Edited by 1st Lt. Guy O. Shirey,, M. O. R. C., U. S. A.*

EARLY METHODS AND ERRORS.

Dr. Bernard opened his lecture with the following significant compliment to American Surgeons: "We French surgeons go to America when we desire to learn how to do better surgery. Before the war I often went to Germany only to learn what I should not do."

MISTAKES WE MADE AT THE BEGINNING OF THE WAR.

"Up to the beginning of this war the majority of wounds received by men in war were bullet wounds and were considered to be, generally, aseptic. Our observers in the Russo-Jap war advised us to dress them and to leave alone. The same methods were used in the Balkan Wars, the wounded man was hurriedly given first-aid and sent to the interior, to the Base Hospitals. But we soon found out that the conditions and methods of this war were different, altogether different. We quickly saw our mistakes. We found that only one out of twenty were bullet wounds and that the majority were shell wounds, projectile wounds or those caused by grenades and were almost invariably infected.

REASONS FOR PREVIOUS FAILURES.

"Wounds caused by smooth bullets are not bad, but those caused by bullets with flat side turned first, act much the same as shell wounds. (Boche foresightedness). Practically all soldiers in the trenches are dirty. Dirty, wet, muddy clothing easily infects

*Lt. Shirey is from Little River County, Arkansas, son of Dr. W. L. Shirey of Foreman.

wounds and practically all wounds received in the trenches are infected. You may notice, at first, that the soldier has a small skin wound, then on closer inspection and on opening the wound you will find it more serious. Projectiles have a turning, revolving movement bruising and injuring muscle tissue, nerve tissue and larger blood vessels. It usually renders the muscle tissue black or it may become pale. In either case it becomes dead tissue and must be removed—you must cut it out. Therefore we found that the old way of dressing the patient hurriedly and sending him to the interior was very bad. Very disastrous results came about.

RESULTS OF EARLY MISTAKES.

"We saw trainloads of our men roll in with Gas Gangrene already present. Many died enroute and others came in with General Sepsis and far beyond cure. We saw men in this condition who apparently had only a slight wound, primarily—likely in the arm or leg, but ending fatally, all because we hurriedly dressed the patient and sent him along. We quickly changed our methods.

PRESENT PRACTICE.

"We operate at once. That is to say, we do what we call in France a "*Debridement,*' which is a thorough and extensive exposure of the wound, not only through the skin and superficial tissue but through all of the dead tissue, removing same from both entrance and exit of the bullet, projectile or shell as the case may be.

THE "DEBRIDEMENT."

"Let me impress upon you that skilled hands are necessary to do a Debridement and it must be done under a general anesthetic (we use Ethyl Chloride, which we find is quick, safe and the patient can be moved on out of the way in a short time, two or three hours). I say that a quick incision must be made and at the First Surgical Aid Station by skillful surgeons, for very often you open up what looks to be a slight wound and you find a large hemorrhage, or it may lead you up against a large nerve or blood vessel. Thus it becomes a very delicate operation, which can't be performed by everyone. If you find the shell or bullet, take it out, but do not look for it. It is necessary to make a large opening. A small and insignificant looking wound may be the worst, so it is necessary that your incision be plenty big enough for good drainage and so that you can make a clean wound of it. The germ causing gas gangrene cannot flourish or live in an open wound. The wound usually heals quickly after such opening. The worst gas gangrene can be cured after such extensive openings.

"So when you find shell wounds, do a Debridement, thorough and extensive under a general anesthetic. You may not find the projectile or bullet, but the opening and removal of dead tissue will do a great deal of good. When you do this always label your patient viz.: 'Debridement done or operated upon, can travel.' Patients must go further on into the interior bases as soon as possible to make room for other wounded."

Col. Ashford, Division Surgeon, 1st Division American Expeditionary Forces, asks: "Where and when is the most opportune time and place to do this Debridement?"

WHEN TO DO A "DEBRIDEMENT."

Dr. Bernard: "This is very, very important. The location of the wound has much to do with the necessity of doing this operation quickly. The calf of the leg is the most dangerous place for gas gangrene to develop. Then comes in the order named: the thigh, forearm, arm and buttock. In the other parts of the body you rarely see gangrene. So when the above are seats of wounds do your debridement accordingly. Take, for instance, a perforating wound of the thigh from without inward about midway from between the knee and hip. Open an entrance and exit of projectile or bullet and then open the anterior thigh down to the plane of the passage of the bullet so that you retract and see all. In a wound like this you must go as far as the projectile goes, following it up, hence the general anesthetic. Infection may set in very quickly, so this must be done as quickly as possible at the First Surgical Aid Station.

THE FIRST DRESSING.

"We will now take a man from the time he is wounded in the arm and bleeding until he arrives at the Evacuation Hospital. He is taken first to one of the Poste de Secours, a quick dressing is done by first washing wound with pure alcohol, then painting wound with Tr. Iodine and dusting with Vincents Powder, which is composed of Hypochlorite of Lime 10 parts and Boric Acid 90 parts. This powder seems to have been placed in all wounds by a standing order, but over large wounds person rendering will place too much

and the Borie Acid will poison patient. It will not sterilize any deeper than other antiseptics.

THE TOURNIQUET.

"Tere we take up the tourniquet. Will the person doing the first aid dressing place a tourniquet, is often asked. Yes, if it is indicated and it is the only thing to save life, when patient is going soon to a surgeon. Many surgeons have discouraged the use of the Tourniquet and name many bad results from its use. However, a large hemorrhage is often the cause of gas gangrene while a tourniquet is not. I can recall ten cases where the want ofa tourniquet cost a soldierhis life. These all occurred at the battle of the Marne and within fourteen days. It is good practice to place a tourniquet when the wound is in the direction of a big vessel, for hemorrhage may occur later unexpectedly, as in the case where the projectile is lying in the wall or against a big blood vessel acting as a cork to the hole it cut into it and in motor transit the jarring may be severe enough to jar the projectile loose, thereby costing a life from hemorrhage. A tourniquet must be placed next to the skin and not over clothing. Esmareh's bandage may be used, but the most convenient tourniquet is a heavy rubber tubing in rolls. You can cut off just what you need for each individual case.

THE LABEL.

"You must not send patient on his way without a tag or label. Use red or blue lead pencil, so as to attract attention, stating on tag: Emergency Tourniquet applied to (part of body). Then he goes to the surgeon.

THE SURGICAL ADVANCE STATION.

"The Surgical Advance Station is just what the patient is looking for. There is absolutely no need of a dressing station. To dress and redress a wound before operation is time lost and time is precious, besides there being a chance for further infection.

"Patient goes from First Aid Station (Poste de Secour, to Surgical Advance Station (our Field Hospital and Ambulance Company, combined). This Surgical Advance Station must have protection from gun fire. It must have at least fifty beds or it is of little service. It must be equipped with operating rooms, wards and comfortable places for both patients and surgeons, and the better it is lighted the better it will be for all concerned. It should not be where troops may advance and it must be all underground.

AMBULANCE GROUP.

"Ambulance group may have to take patients further back. Ambulances work better in a small group, say six ambulances to a group. If the group is too large it will attract attention. It must not be located in a village for it will be shelled. Place it in the field, at a distance from the big roads and from a railroad. (Six ambulances work in conjunction with a field hospital).

"Here the patient is operated upon properly by a skilled surgeon. Where there are two or three operating rooms which can be run day and night, have at least 50 to 100 beds, dining room and all necessary equipment. When the Debridement is completed the patient is sent along to an Evacuation Group by motor.

EVACUATION GROUPS.

"This is generally a large outfit with about 100 medical men and usually 2,000 beds. From here the patient is sent back to base units, such as Red Cross Hospitals, etc. Evacuation units may be about 20 Kilometers from the front lines. They must be near a good railroad or river, or both, so that wounded can be easily transported further back. Chest wounds must not be moved if possible to have it so. The river affords a smooth, slow ride via boat or Hospital Barge, usually two, side by side—one for the very sick. As the patient gets better they are transferred to the other boat. The boat or barge is taken up or down the river as the case may be by a motor boat. The motor boat can also move the barges back and forth as the fighting front changes."

Col. Ashford asked if it were necessary to have skilled surgeon in the first aid station. Dr. Bernard replied, saying: "No, but he must be skilled in first aid. Usually he is a medical student. He must also be a strong man with plenty of nerve, for such a place is neither pleasant nor safe. It is, of course, in the third line trenches."

Col. Ashford intervened again with another question: "Say you had 100 skilled surgeons, what percentage would you use close up to the front line in the First Surgical Aid Stations and what percentage would you keep back in the base units?"

The Doctor replied: "Seventy-five per cent should be used close up and twenty-five per

cent further back. It takes skilled hands to save lives and the quicker they get their work done, the better it is. It is very disastrous to wait."

GENERAL METHOD OF TREATMENT OF WAR WOUNDS DURING AND AFTER THE DEBRIDEMENT.

Taking up his new subject, Dr. Bernard continued: "It is very difficult to find an antiseptic which is a germicide that can be placed on living tissue and not injure that tissue. It is claimed that such antiseptics coagulate the protoplasm and hinders the natural healing process of a wound. The above is claimed by many well known surgeons.

WAR WOUNDS.

"You well know that nearly all of our war wounds are septic, so what are you going to do? It was found that many surgeons discovered that there were antiseptics which would give good results. There are many different solutions offered up by various surgeons with their name attached to them. All doctors like to have their solutions used. The principal one used, however, is a Saline Solution. Along with an aseptic dressing Dr. Carrel used *his* antiseptic. He evidently endeavored to use an antiseptic which would not injure the living cells. He first used Boracic Acid solution and ended up on his famous Hypochloride of Soda solution.

CARREL'S SYSTEM.

"Surgeons have a great disease of writing too much and too quickly. They sometimes lose their common sense. There are radicalists and conservatists. Both are dangerous in a war like this. It would be absurd for any surgeon to be a radicalist in all cases or vice versa.

"In doing a debridement you must do it in a surgical way, keeping in mind not to destroy important structures. To those who are prone to write statistics: you must operate on a man at the front, you must send him away as soon as possible—you can't keep him. He must be evacuated to make room for others. You don't know what becomes of him and you can't follow him up easily. Therefore refrain from writing statistics.

"At the front it is often difficult to make a clear opinion as to what must be done. It all has to be done quickly and the patient being sent away quickly, it is impossible for you to know the results. Especially in cranial surgery, be careful about statistics. You may do a cranial operation and keep the patient for two weeks. You may send him on apparently cured and he dies in two days, two months or two years later. What we do now is Moderate Excision.

"We make a moderate excision of the wound, after which most of us follow up this with Carrel's solution. The moderate excision is done at the time of the Debridement. For example: Take the perforated wound of the thigh that we discussed a few minutes ago, you remove the skin at the entrance and exit of the bullet or shell. You make a long incision both at the entrance and exit and then another down the center of the leg to the place (Anterior and posterior as the case may be) of the passage of the shell. This enables you to retract and to see all the bruised tissue. It also enables you to see the pale, black and bruised parts which in most cases are dead tissue.

"It will also show you that when you cut through any tissue that does not bleed, it is bad tissue and possibly dead tissue. Please note that this is important. Then with your scissors you do a moderate excision, usually taking off the outside surface of the bruised tissue, removing what you know to be dead fragments, then follow up with Carrel treatment. You can carry out this treatment and send your patient on in twelve to twenty days. At the end of the tenth day you can usually close incisions with sutures and in a fortnight you can send him on to the interior.

"This method is very much better than moving the patient from one hospital or Surgical Aid Station to another for a slight operation and later moving him on back for another and, perhaps, later even for another, thus weakening him and without the possibility of rendering better or more efficient operating and care, since we have two-thirds of our best men close up to the front lines.

ANESTHESIA.

"Now, as to Anesthesia—In war surgery you invariably have to deal with tired, dirty, shocked and often extremely shocked patients. You may hesitate to operate. Don't do it. Ask yourself the question—what kind of anesthesia will I use? I might divert and say here that some use local with very good results. I never use it. I believe that it is bad morally for the patient. You desire good end

result. Spinal antsthesia is said to be good in some surgery but not in war surgery. It may inerease the shoek.

"General anesthesia is the *only* anesthesia in war surgery. Chloroform was used in the beginning of the war but not now, as it is likely to inerease shock, besides other eomplieations may set in. The best anestheties are ether and ethyl ehloride. For a long anesthetis ether is preferable if you know before hand that the operation is to be a long one. When the patient is in very mueh shoek, Ethyl Chloride is a very mueh better anesthetie. Sometimes you may be surprised by an operation whieh at first looked to be slight and whieh, after your ineision, you found to be a large and delieate one. But even so it seems to me that you should always start with Ethyl Chloride. It will not give bad results, especially if the patient is in very mueh shoek to begin with. It should be mentioned here that Ethyl Chloride will answer the purpose of the neeessary general anesthesia in eranial operations."

Dr. Bernard then demonstrated the Ombiedanne Mask for giving ether. This is a neat, light, simple and exeeedingly eonvenient deviee with a graduated throttle or eontrol whieh eertainly aids the anesthetist greatly. He also demonstrated the Masque de Comus whieh is devised espeeially for giving Ethyl Chloride anestheties. Five ee. glass tube of Ethyl Chloridt (Kelene) will give a good general anesthetie for one-half hour.

In eonelusion, the Doctor said: "When you expose, as I mentioned formerly, an extensive exposure, also do a moderate exeision, followed by the Carrel treatment, and always do your exposure under a general anesthetie."

Col. Ashford desired to know how many of these Ethyl Chloride 5 ee. tubes were earried with an Ambulanee Group. To this the Doetor replied: "Five hundred tubes, but a large quantity is always in reserve or in storage at a eonvenient plaee. I note that this Ethyl Chloride is the same as is used in the States for loeal skin anesthesia as in earbuneles, boils, felons, ete."

The Colonel then asked the surgeons present to ask whatever questions they desired. Dr. Finney was on the job.

Dr. Finney: "What preparation do you make of the field of operation before ineision?"

Dr. Bernard: "Ether first, then Dakins Solution and paint with Tineture of Iodine."

Dr. Finney: "Then you do not wash and serub with any sort of neutral soap?"

Dr. Bernard: "No, doetor, you might push some of the dirt further inside."

Dr. Finney: "What is your experienee with Carrel's Solution. I notiee that there are a good many who question its value."

Dr. Bernard: 'My experienee with it forees me to report quite favorably and I used it on every oeeasion."

SPECIAL SURGERY.

"At the beginning of the war," eontinued Dr. Bernard, "it was the general idea not to operate on any abnormal ease. The Military Board gave out orders not to operate on any abdominal ease at the front.

ABDOMINAL CASES.

"Reasons: In previous wars sueh experienees were very bad. In the Afriean wars England sent her best surgeons to Afriea to do the operating. Many of them wrote baek, Roberts and others, that all eases, abdominal, operated upon died and that many of those who were not operated upon reeovered. Others wrote back that out of many abdominal eases operated upon only one or two reeovered in the Boer War. Same reports eame in from our observers in the Russo-Jap War and also in the Balkan Wars. The death rate of the largest number kept aeeount of was 77%. In Oetober, 1914, a new order eame out: 'Do the Murphy Operation.' This operation was the making of an opening in the hypo-gastrie region big enough to plaee a large drainage tube in the lower part of the abdomen. This was done under a loeal anesthetie and lowered the mortality of 77% to 76%. It was unsueeessful however as it was no good where there were perforations or hemorrhage.

"After the battle of the Marne eonditions ehanged. A Paris surgeon, Dr. Genu, told the Board of Health that if we would do an abdominal operation in eivil life, we owed it as a duty to do the same for the soldiers at the front. In 136 eases of perforating wounds of the abdomen, forty were operated upon with twenty-seven deaths. Ninety-one eases were not operated upon and twenty-seven died. The above operations were performed under good eonditions. Of the four eases who were operated on late, three died. Still another report of sixty-eight eases not operated on, showed only thirty-six deaths. My eonelusion is that in war surgery penetrating wounds of the abdomen are so very serious as

to prognosis, that the only logical treatment is a laparotomy. I never saw a penetrating wound with perforations in the abdomen that recovered. It is a rare case in which laparotomy is not advisable.

"In Thoracic abdominal wounds a general anesthetic is disastrous. Never attempt an operation after thirty-six hours.

THORACIC ABDOMINAL WOUNDS.

"We will now consider the case of a man wounded in the abdomen. The patient first comes to the Poste de Secour. Here it is very important to make a correct diagnosis, as it is very hard to tell just when you have a perforation. The patient must not eat or drink and must be labeled so as not to be given water or food. Antitetanic serum, which is often given in belly wall must be given elsewhere as the pain from serum will make it difficult for the surgeon to distinguish it from perforation pain. The patient then goes to the First Surgical Aid Station. It is better to carry him on a stretcher rather than by motor. The motor will likely shake the patient up much more than the litter bearers. The surgeon here decides whether to operate or not. I had a case brought to me at 4:00 p. m. on one occasion. The patient was wounded at 9:00 a. m. and was carried by the litter bearers for seven hours. The bullet entered the buttock and came out just below Umbilicus. There was one yard of intestine hanging out into the man's trousers. There were two perforations and great shock. I operated on the case and it came out nicely. If the patient has no perforations of liver, spleen, stomach or kidneys he has a much better chance of getting well. Always have hope for your patient and if possible to save him, operate at once.

"Some claim that abdominal operations take too much time and that you can be more useful by taking care of those whom you know you can save. This is both brutal and cruel. Try to save all.

"My conclusion is that Laparotomy is the only rational treatment for such wounds. Of course the situation of the wound, the time, number of organs penetrated and the effect of transportation have all to do with the rate of recovery. The mortality is 64%.

"Medical treatment is the best for general thoracic cases. Compressive bandage, salines, gelatinous serum, morphia, absolute rest for patient and no talking allowed by him. Transporting such patients is very bad. Surgical treatment consists of treating and cleaning the wound. Should you give general anesthetic, you may kill him. If you open him up you may produce great hemorrhage and open pneumo-thorax. When the patient is placed at absolute rest the hemorrhage usually stops. Should he keep on bleeding, operate before he gets too weak and do it undtr local anesthetic. You usually get a bad result. Leave him alone if possible and get shell out in three or four weeks. Septic complication may occur, fluid and blood in pleural cavity may become suppurative and force you to operate, but it is very necessary to take the shell out when the patient is apparently well and all the inflammation has subsided. Either take out under fluoroscope or open method. Both are easy and close. It is not necessary to drain.

CRANIAL CASES.

"We are not at all decided on these cases. The opinion of the French Military Board of Health is that they should be taken far to the interior. The very bad cases, they say, should be kept as 'In transportables.' These would, of course, be cases of coma, etc. The serous cavities of the brain do not react very quickly to inflammatory process but it is very advisable to operate cranial cases quickly. Do not wait. Remove the seat of infection. Transporting these cases is very bad, especially if the shell is in the brain tissue. Motors over rough roads will cause the shell to bruise the brain tissue and to go deeper. It is necessary to carefully examine all scalp wounds. Men may have small scalp wounds and be walking around apparently all right and still have a shell in his brain and many times a fracture of the skull. Craniotomy is what we do. Chissel and mallet are strictly forbidden. The temporary craniotomy is often done. Five holes in a polygon shape over seat of fracture and sawing between with Gigli's saw, giving you a healthy opening. When Dura is not open do not open it.

"In extracting shells from the brain you must be very careful as to locations of the different senses as they are as yet undetermined definitely.

"Be very prudent in handling delicate brain tissue and do not do more harm."

Dr. Finney interrupted to ask the doctor what he did with perforated wounds of the skull. Dr. Bernard replied: "Clean the entrance and exit. Remove brain tissue that is hanging out if there is any. Use no antiseptics on brain tissue. It is very irritating.

Do not put a through and through drainage along the track of the skull.

Dr. Finney: "Do you know anything to prevent a hernia?"

Dr. Bernard: "They are common and usually come when there is a small opening caused by edema pushing brain tissue out, etc. This easily becomes infected and must be taken off. Lumbar puncture at times may prevent hernia, hence prevent it. We use saline solution also."

Dr. Shirey asked: "Do you ever do a decompression to relieve pressure?"

Dr. Bernard: "Lumbar puncture is often used and then, too, decompressions are done but they are dangerous."

Dr. Finney: "Do you drain the pleural cavity?"

Dr. Bernard: "No, not necessarily. We often drain down to the pleura but not through it.

COMPLICATIONS OF WAR WOUNDS.

SHOCK.

"Nearly all wounds have more or less shock and usually more. Often very small wounds will give very great shock, more than you would think, especially in wounds from hand and rifle grenades when many small pieces of wood lodge in the body. Often men die quickly from shock before you have time to do anything for them.

"A bad burn will also quickly cause shock. They also die quickly. The first symptoms are: coldness, quick pulse, weakness and bad breathing. Heat patient at once—of course use hot water bottles if available. We often put the patient on a stretcher or cot and put an oil stove underneath him. We also place hoops over the bed and cover them with blankets leaving the body in a sort of a tent into which we place electric lights to heat the patient. To give drugs per mouth is not good, as you understand that patient may be awaiting an operation or it may be an abdominal case and, of course, should not be allowed food or drink per mouth. But our drugs we usually give per hypo. Saline and Adrenalin 20m may be given first. If patient has not lost much blood you can give saline 1 liter intravenously, if not 250 mcc under the skin is good. Our other common stimulants are Camphorated Oil, Sparteine and Strychnine.

Do we use morphia? Yes, when patient is in much pain, it is better to use morphia than to let him suffer. The pain is more weakening than the subsequent effect of the morphia. A good thing to give along with morphia is caffeine. It is a kind of antidote for morphia and stimulates and upholds the effect of the morphine.

"When can you operate on a patient in shock? As a rule wait two or three hours and see if you can bolster the patient up. Afterwards, if the patient is still alive, operate. If you have internal hemorrhage and are positive about it, operate at once and stop the source of shock. Now, in abdominal wounds, if you get a patient two or three hours after he has been wounded and he is in shock, do not wait. Operate at once. While you are getting ready, the usual hypos are given to strengthen your patient.

"We have already been told about the anesthesia used. Ethyl Chloride does not give much shock and does not increase shock as much as ether. It is good in short operations, I think.

(Having seen Dr. Bernard operate some time ago and seeing the use of Ethyl Chloride, Kelene local anesthetic, same as we use in the States, I think it excellent in small operations where a general anesthetic is needed, but in longer operations it will be too expensive and it is very irritating to mucous membrane and causes nausea and vomiting as much as any other anesthetic.—Dr. Shirey.)

(It also might be noted in regard to the above that the patient wakens quickly, although the French surgeons say there is never any untoward effects of it. Local Anesthesia of Novocain will succeed this I am sure. —Dr. Shirey.)

GAS GANGRENE.

"There are two kinds of Gas Gangrene—local and general. Gas Gangrene is not always caused by the same germ. Several germs or bacteria may be used and usually are present at the same time, such as Streptococcus, Colon, Septic Vibrio, etc. At the beginning of the war it was very frequent but now we are learning to handle it in time, although you will still see some cases. We now do the "Debridement" at once and start Carrel's solution.

"The situation of the wound has a great deal to do with the treatment. Gas Gangrene develops of course quicker in the calf of the leg than in any other part of the body, then in the thigh, buttocks, forearm and arm in

order named. The early sign is hard limb. The general symptoms are: Color of skin—Bronzed aedema, Razor sign-dull over healthy part and hollow over grassy part, odor. When all this occurs you must isolate your case. Special doctors and nurses are to look after this class of patients, only. The hot air and tourniquet treatment as suggested by some is questionable. The knife is the only rational treatment. Make a large and extensive exposure of the wound. Do not be conservative, take away all of the tissue that is bad. Then institute the Carrel treatment. Carrel's treatment alone cannot do any good and you must use it after extensive unconservative use of the knife and it will clean up the situation in a few days. If not, decide upon amputation at once. This is not only the best thing for you but it will also save your patient's life. Your patients are generally willing for you to do anything for them. They often tell you that they understand all, that they are butchers, too, in private life.

"The preventative treatment is the Debridement in time. Serum treatment is not successful. All cases are not alike. You can prevent Tetanus by giving Antitetanic serum at the first aid station. Then give a second dose eight days later. If the patient is delayed in getting well or has to be operated upon a second time, give him a third dose sure. These are the advantages of a completed operation with extraction of shell at once: The patient will not as a rule be compelled to undergo another operation, it saves time for both surgeon and man, it saves the government money and it gets the man back to the front quicker. If you leave shell in wound, render first aid and send the man to the interior, he will get well and go home for a rest. In a short time he is recalled to the front again. As a rule by the time he smells gunpowder and gets close to Bosche trenches again that shell is hurting him and he calls for an operation. You can't refuse, so into the hospital he goes. Hence an X-ray machine and Radiographist must work in conjunction with the surgeon at all times.

"There are two or three good methods of extracting shells from wounded at the front. In limbs it is easy to take a fluoroscope and on skin from two angles and measure a similar drawing on paper and tell easily how deep and where to go."

(Dr. Bernard also explained very intelligently two other ways, the Haret and the Strahl methods, which work on the principles of the triangle.)

DISEASED TONSILS, THEIR INFLUENCE ON HEALTH AND TECHNIC OF REMOVAL.*

By L. Herbert Lanier, M. D.,
Texarkana.

In any conditions in which irritating material is present in the blood, whether associated with infectious processes in the form of toxins, owing to the absorption of toxic material from the intestinal tract, or to an excess of uric-acid in any of its peculiar forms, the lymphatic structure is likely to be involved. This is especially true of the tonsils.

There may be no systemic manifestations of general toxemia or excess of uric-acid yet in individuals of the lymphatic temperament and of a strumous diathesis, some variety of inflammation of the tonsils is usually present it may be superficial or a cryptic, or the so-called parenchymatous, involving the entire structure. There is a history in these cases of repeated attacks of acute tonsillitis, varying in severity and degree. "The attacks may be accompanied with slight constitutional symptoms of uric-acid or rheumatic conditions and while there are acute exacerbations, yet the irritation is constant and the inflammatory process, although lacking in clinical phenomena goes slowly on. The tonsils are large, irregular and may almost fill the faucial space. The enlargement, of course, interferes with function and nasal resonance. The thick, muffled voice; the constant accumulation of secretion in the throat; foul breath; usually due to the accumulated material in crypts of the tonsil, and the regurgitation into the nasopharynx of food and fluid on attempts to swallow are present.

The uric-acid diathesis may exist in very young children and frequently the acute attack of tonsillitis due to this uric-acid diathesis, the patient will suffer from general malaise; dull headache; listlessness; pain in the joints and in the back; stiffness in the neck, with a slight soreness of the throat. An examination of the urine will usually show uric-acid in excess. With repeated attacks there will be increase of the connective tissue element of the tonsil and the enlarged tonsil

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

will be of the hard variety, calling for complete removal, if a cure is effected.

Herpetic Tonsillitis is also associated with some constitutional diathesis, general lowered vitality or the various forms of anemia, especially that due to malaria. The exciting cause is usually cold or exposure.

Tuberculosis may affect the tonsils primarily and become generalized from here by way of the lymph channels to the lungs also tubercle bacilli taken into the month may reach the lymph channels by entrance into the tonsils and set up a reaction in a near-by node. This is important, since in large cities tubercular disease is estimated to be responsible for at least forty per cent of all deaths.

Bacteria may temporarily or permanently invade the blood stream through the tonsils, causing bacteremia and septicemia. When the tonsils are diseased constitutional symptoms may be produced by the absorption of poisonous products by the blood current from this area; and their distribution throughout the system causing toxemia.

Disorders of metabolism, either constitutional or local, may cause pathological hypertrophy of the tonsils through increased production and decreased elimination of toxic products affecting the blood stream as it does; thus it is easy to see how the tonsils influence general health.

Since the tonsils may act as foci of infection, their complete removal with the capsule intact is absolutely necessary when surgical interference is indicated. The plica at the base which carries with it many lymphoid follicles, should also be removed.

In any of the forms of inflammation about the palate the tonsils may be implicated and bear a large share of the damage; but frequently they are the only site of the lesion and several forms of tonsillitis are therefore described, which differ pathologically but little from those already mentioned. Catarrhal, lacunar, or follicular, and phlegmonous tonsillitis are the usual forms. Follicular inflammation may invade but a few of the crypts and remain at a low development for periods; and as the bacterial elements present may be virulent, this bears a clinically important relation to diphtheria and tuberculosis. When the bottom of the crypt is weakened and perforated by the inflammatory process the most severe forms of phlegmonous tonsillitis occur, one or both of these organs will be involved, considerable constitutional disturbance is usual, abscesses may form and break in varying directions and are most dangerous when involving the vessels of the neck or opening into the larynx.

A chronic productive form of tonsillitis results in great increase in the size of the part, and as the condition is often found in children, it is of great importance for their nutrition; for they are deprived of their normal supply of oxygen at every intake through the narrowed air passages, particularly so because they are apt to form the habit of mouth breathing. Their digestion suffers also. In these cases there may be simple lymphoid hyperplasia, as also in the vault of the pharynx, differing from the fibrosis which follows repeated acute tonsillitis.

The technic of Tonsillectomy as practiced by myself is not original with me, but rather conforms to the Boettcher method. I have done this operation in hundreds of cases without a single serious hemorrhage or unpleasant post-operative experience. All of my operations on children, and most of my operations on adults, have been done under ether anesthesia. I always prefer a general anesthetic, since trauma and fright are less and they are controlled better than experienced under local anesthesia. The technic is essentially the same whether done under a local or a general anesthetic.

The instruments used are Whitehead's mouth gag, the size indicated with or without tongue depressor. If tongue depressor separate from gag is needed, I use Pynchon's, Boettcher's tenaculum (2 prongs), Boettcher's scissors (which when closed, is the best dissector I ever saw,, Eve's tonsil snare. Abraham Allport's right angle separator. I sometimes use White's tonsil siezing forceps instead of Boettcher's tenaculum; and in cases with long uvula, use Boettcher's uvula forceps.

The operation under general anesthesia, is described briefly as follows: After placing the mouth gag and controlling the tongue, the upper pole of the tonsil is drawn toward the opposite tonsil, showing adhesions if any. To the pillars, the superior constrictor muscle with its fascia and the venous plexus of the pharynx is pulled toward the median line. This is gently pushed away, then Allport's right angle separation is carried completely around the tonsil separating the pillars from the tonsil. A Boettcher's scissors closed is also carried around the tonsil to the base of

the tongue, taking care not to injure the glosso pharyngeal nerve.

Eve's snare armed with No. 7 piano wire is looped over the forcep and continued over the tonsil to the base of the tongue, while considerable traction is made to bring the tonsil toward the median line. When the wire is sent home, the second tonsil is removed in the same way. The throat is then inspected for any remnant of lymphoid tissue remaining. If present, it is removed with a snare or the seissors. This proeedure is invariably effective in removing the entire tonsil with capsule. The fossae are dried with gauze, then paint gently with tineture of iodine, thus controlling capillary hemorrhage.

When serious hemorrhage follows operations on the tonsils, it usually eomes from one of the numerous tonsillar arteries whieh are enlarged, and not from the ascending pharyngeal or internal carotid. Therefore, either venous or arterial hemorrhage is easily controlled by pieking up the vessel and twisting or by ligating aecording to the indications. However, in many hundreds of tonsil operations I have never had an alarming hemorrhage.

THE MOST IMPORTANT PART OF THE CANCER QUESTION IS PREVENTION.

Too much emphasis eannot, therefore, be laid on the early removal of all lesions on the face and hands, espeeially sueh as seborrheie keratoses, warts, moles, pimples, angiomas, ete. I assume that the term "pimple," as given by patients, must mean some small fibrous tumor. This removal is particularly important for people over fifty years of age, as that is when the majority of these cases begin.

The eases due to injury eould not have been prevented, and present a puzzling problem. Skin caneers should be suspected in any uleer of the faee or extremities, whieh does not heal readily under ordinary treatment. If skin caneer exists it should be treated most energetieally either by exeision, intensive Roentgen ray or radium. Treatment should be instituted early while the lesions are small and before extensive destruetion has resulted. —S. E. Sweitzer, Journal A. M. A.

The food you waste today may mean HUNGER to someone, somewhere, sometime. Be saving.

The medieal offieer bears the same relative position in war as in peaee, in that he is a eonservator of health and life.

MORLEY.

THE PREPARATION AND STANDARDIZATION OF OVARIAN AND PLACENTAL EXTRACTS— SURGERY, GYNECOLOGY AND OBSTETRICS.

Volume XXX, 1917, 324.

Morley gives due emphasis in his artiele to the need for more uniform methods in the preparation of ovarian and plaeental extraets. Tangible laboratory and elinieal data are still moreover laeking in extent. A review of the more important artieles on the above subjeet reveals the eireumstanee that it is only within the last ten years that an attempt has been made to isolate the aetive prineiple of the ovary and plaeenta, especially the former. Ineoveseo (1908) obtained "lipoids" from the red blood eorpuseles, hypophysis, kidney, adrenals, ovaries, the testieles and the eorpora lutea, and discovered they exerted a eertain action on the female genitalia. The "homo-stimulating" lipoids, he found, had an action on the same organ from whieh they were derived, the "hetero-stimulating" lipoids exereising an aetion on different organs —this division he diseovered later being purely arbitrary. Hermann (1915) believes he has sueeeeded in separating the "aetive substanee" of the corpus luteum and of the plaeenta as a speeifie ehemical substance, having identieal physiologieal properties. Hermann possibly obtained his so-called aetive substanee in a purer state. After engaging in speeial researeh work along this line during the last two years, Morley expresses the opinion that up to the present time no ideal method of preparation has been formulated, and until this is aeeomplished, standardization of the product will not be attempted. Considering the newness of the subjeet the artiele eoneludes with quite an extensive bibliography.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by tbe Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by tbe rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

A CHRISTMAS GREETING.

Christmas has been a Christian festival for centuries, but the festival itself long antedates Christianity. It is practically a world-wide festival. Thousands of years ago the sun-worshipers hailed the day when, after each day's shortening sun, with its threat to desert mankind entirely, it began to lengthen the day again and so was a cause of rejoicing as the new birth of the sun. Later the same astronomical significance of the festival was observed by the Roman pagans in the great feast of Saturnalia during which the people plunged into all manner of excesses of eating and drinking and the temples were decorated with evergreens. Then came the Christian era and presently Constantine permitted Christians to worship unmolested for the first time. Then it was that, the actual day of the Nativity being unknown, the Saturnalia festival was adopted as that anniversary in the hope that it would remove from the ancient pagan festival its objectionable features. Thus, in the course of centuries Christmas has come to be regarded as a universal season of joy in which Christians of all denominations, Jews and all others can join. And surely, outside of any religious significance, it is a blessed thing to have one day in the year when all can forget the trials of their daily lives and in exchange of gifts and the enjoyment of good cheer spend a day in which selfishness has no part.

"A Merry Christmas" is the slogan which has come down through ages. Somehow it does not seem quite to fit the occasion in this year of the world war. But in our favored country we as least can spend and wish each other a Thankful Christmas. We have much to be thankful for. We are in the war, but we are at least spared the accentuated horrors of having war on our own soil, as have almost all the leading nations of Europe, or if Germany has not yet been invaded on its own soil it suffers severely from food and fuel privations, about which we have experienced nothing. It is bad enough to read of the casualties among our troops on the west front—and they will increase and multiply—but we live in no fear of invasion, of hearing the cannon's roar or the aerial bomb cast down from the heights by Zeppelin raiders. So, whether or not we spend a Merry Christmas we can at least spend a thankful one and wish

all our friends the felicity and good cheer that circumstances may permit.

DISTINGUISHED VISITORS HERE.

Surgeon General W. C. Gorgas, accompanied by other distinguished medical scientists, visited Little Rock on December 4 and 5. The others were Colonel Howard, General Gorgas' aid; Major William Welch, Dean of Johns Hopkins' Medical Department; Major Victor C. Vaughan, Dean of Michigan University, medical department; Major Isadore Dyer, Dean Tulane University, medical department, and Major Oscar Dowling, State Health Officer of Louisiana. They came on a visit of inspection and it is pleasing to note that Little Rock, through its Board of Commerce, properly entertained them with a banquet at the Hotel Marion. They were also guests at the Headquarters mess at Camp Pike. They visited the base hospital, the regimental infirmaries and inspected the sanitation of the camp.

Surgeon General Gorgas has accomplished a wonderful work, the outstanding feature of which was the cleansing of Havana of yellow fever and making the Panama Canal Zone habitable; so that the canal could be completed without a great toll of human lives. Perhaps never in the whole history of the U. S. Army has a man so well qualified for the position, filled that of Surgeon General. In charge now of the medical work in which no less than 14,000 physicians and surgeons are employed, a work which covers the whole vast army the United States is raising, there is no fear but that he will give the best possible account of himself. In such hands the health of the army, at least while on this side, is as safe as human effort can make it.

PAY YOUR DUES PROMPTLY.

It is in order to remind all members of the Arkansas Medical Society that dues for the year 1918 are due and payable on or before January 1. So long as the dues must be paid why delay paying them? The secretaries have a lot of work to do and it is not right that their duties should be made more onerous by having to send out reminders.

The society must have money to pay current expenses and it must come from the annual dues which are moderate enough. Don't say "Yes; I must attend to that"—and let it go at that. Send in your dues today and have it over with. The time is now at hand, also, when the county societies will elect annual officers. This is a matter to which the secretaries should give publicity by sending to the Journal the names of those elected. It is your Journal, you know, and everything should go into it which will interest its readers.

Editorial Clippings.

SENTENTIOUS.

When a doctor gets the "drugless" microbe in his system, he should take down his shingle.

A slow doctor never gets anywhere.

It is the doctor and not the location, which insures success.

Good habits and good morals are a physician's "sine qua non." Bad habits put a period to the brightest prospects.

Many start well; but some fail.

The breath of booze will blow away business.

A good character beats pelf.

It is still true that "an honest man is the noblest work of God."

Some rob "Uncle Sam" who wouldn't pick a pocket!

Some professed Christians "rob God" by keeping what He gives them.

Character built upon the sands of questionable acts will be wrecked.

A vacillating course is a losing one.

There are men who are the impersonation of procrastination, not dependable.

Keep your word, and you will inspire confidence.

Silence is golden, but a rattle-brained man is a pest.

Earn what a good conscience approves; extortion is short-lived.

Keep a discreet tongue in your mouth; and keep your foot out of it.

Good counsel is well meant, but too often fruitless.

Friendliness makes friends; but a cynic freezes us.

Generosity is a fine trait, but selfishness is abominable.

A bibulous doctor will swallow his reputation.

A well-kept office is a mine of wealth; drug-store loafing is costly.

If you are not busy—read!

Don't talk your business on the street corner; attend it in your office.

A quiet hearer is better than a noisy talker.

A "bay-window" looks well; but it is not always an evidence of brains.

There are powerful intellects in weak bodies; avoirdupois is avoirdupois.

A tale-bearer is no better than a tail-bearer.

A good name is one's richest asset. In the language of Shakespeare, "Who steals my purse steals trash; 'twas mine, 'tis his; but he who filches from me my good name, takes that which enriches him not, but leaves me poor indeed.—Field, The Charlotte Medical Journal.

Abstracts.

DIAGNOSIS OF TRACHOMA.

Trachoma is defined by M. H. Foster, Boston (Journal A. M. A., December 1, 1917, as a specific, transmissible, destructive inflammation of the conjunctiva, charaeterized by the formation of the so-called trachoma granulations which may be either papillary or follicular; the ultimate formation of scar tissue; marked chronicity and intractability to all forms of local treatment. The formation of scar tissue is the one all-important diagnotic feature. Clinically it presents itself in two forms; fulminating trachoma and slow trachoma, which latter name the writer thinks applicable to the common form. Fulminating trachoma, which is a rare condition, is separately considered only in the latter part of the article. The writer describes the clinical symptoms and goes at length into the method of examining the eye, which requires thorough acquaintance of the normal and diseased condition in order for the physician to secure a correct diagnosis. These conditions are illustrated with the description which is full of references to the different methods used and the appearances manifested. The virus of slow trachoma is less virulent than that of the other variety and some persons are undoubtedly resistant to it as is shown by the fact that certain members of the same family in which the disease appears may be free from it. There is considerable difference of opinion in regard to the microscopic appearances. It has been commonly taught that the follicles cause the scars either by their rupture or by organization otherwise. But the objections to this view is that the appearances closely resemble those of follicular conjunctivitis which disappear without forming scars. In severe cases, the scar tissue begins in the culdesac and spreads most rapidly in that region. In mild cases it may, first of all, be detected in the inner canthus at the junction of the tarsal plate with the culdesac, and careful search in doubtful cases is required. In all cases of trachoma, pannus is generally present and is now considered as trachoma of the cornea. The permanent pannus of trachoma must be distinguished from that due to corneal ulcer and that from interstitial keratitis. In cases of ulcer, the vessels are larger and are encountered in any part of the cornea. When due to keratitis, the pannus arises from the deeper blood vessels of the sclera and when traced, are proved to be continuous with those of the conjunctiva, while in trachoma, they arise from the conjunctival vessels. The contractions from scars and especially the deformity of the tarsal plate produces trichiasis and the ingrowing hairs irritate the cornea. Deformities of the lids are produced and aggravate the condition. Fulminating trachoma is a severe and acute inflammation of the conjunctiva with abrupt onset. The lids are thickened and swollen. It must be diagnosed in its early stages from severe phlyctenular conjunctivitis and from acute infections of the conjunctiva by various micro-organisms, especially the gonococcus and the diplobacillus of Morax-Axenfeld. Unless one of these organisms is demonstrable in a properly stained smear made from the discharge, the diagnosis may be impossible for two days, but later the characteristic lymphoid enlargement appears. Trachoma may be complicated with other ocular disease, with syphilis, gonorrhea, etc., all of which makes the diagnosis very difficult for the time. But these complicated infections usually subside under proper treatment. The important diagnostic symptoms of true trachoma are the scar tissue, papillary granulations and trachoma follicles, the scar tissue being most im-

portant. The differentiation of follicular conjuctivitis from other inflammatory conditions is given. There is great diversity of opinion as to when trachoma may be called cured. This cannot be done until all of the conjunctiva of the upper lid has been completely replaced by smooth white avascular fibrous scar tissue and the lower lids are free from any evidence of the disease. In conclusion, the writer speaks of the difficulty of obtaining good illustrations of trachoma in its various stages. Those presented in the paper are magnified three times and the lesions are elaborately described.

Personals and News Items.

Dr. A. G. Blankinship is located at Rison.

Dr. William F. Ball has moved from Batesville to Little Rock.

Dr. E. M. Gray has moved from Flora to Evening Shade.

Dr. and Mrs. H. H. Neihuss of El Dorado visited in Little Rock this month.

Dr. J. M. Lemons of Pine Bluff visited in Little Rock and Hot Springs this month.

A REMINDER—The fiscal year of the Society begins January first. Your dues must be paid in advance.

Dr. Carlos C. English of the Missouri State Tubercular Sanitarium has been appointed physician to the Arkansas Tubercular Sanitarium, Booneville.

Dr. William Breathwit was elected Illustrious Potentate of Sahara Temple, Ancient Arabic Order of the Mystic Shrine, at a recent meeting in Pine Bluff.

The annual meeting of the Southern Medical Association was held in Memphis, November 12-15. The officers elected for the ensuing year are as follows: President, Dr. Lewellyn F. Baker, Baltimore, Md.; first vice-president, Dr. Wm. H. Deaderick, Hot Springs, Ark.; second vice-president, Dr. T. C. Halloway, Hazard, Ky.; secretary, Major Seale Harris, Birmingham, Ala. (re-elected).

Dr. C. P. Meriwether, Lt. M. R. C., Secretary of the Arkansas Medical Society, has been appointed a member of the committee on Medical Appeal Boards of the General Medical Board of Council of National Defense. His duties will be to assist Governor Brough in determining the number of districts and territory to be covered by each district, as well as in the selection of the personnel of the medical advisory boards.

A new ruling of the postal authorities requires that the full address of all subscribers, including name of street and number or office building, be given on publications going to towns or cities having free delivery. Journals not so addressed will be classed as unmailable matter. Will county secretaries kindly remember this when filling out receipts for members. Please ask for the full address and write the same plainly.

Dr. W. A. Nowlin, Roland; Dr. L. B. Moreland, Natural Steps; Dr. J. S. Jones, Searcy; Dr. C. M. Brooks, Roland; Dr. J. C. Chenault, England; Dr. S. N. Hutchison, Bauxite; Dr. T. J. Wood, Evening Shade; Dr. L. M. Crow, Des Arc; Dr. W. W. Lowe, Gillett; Dr. Boulanger Gwaltney, Haskell; Dr. S. P. McConnell, Booneville; Dr. E. H. McCray, Malvern; Dr. J. F. Bradley, Lamar; and Dr. J. R. Lynn, Hazen, visited in Little Rock this month.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas Physicians commissioned in the Medical Reserve Corps, published in the September, October and November issues, the Surgeon General reports:

Andrew James Lyons, Camp Pike, Capt.

Felton William Landrum, Driggs, 1st Lt.

Clinton P. Meriwether, Little Rock, 1st Lt.

10,000 MEN ARE WANTED FOR ARMY MEDICAL CORPS

The Surgeon General's Office issues the following:

At least 10,000 men, between the ages of 18 and 40 years, are urgently needed for the Medical Department of the United States Army before December 15, 1917.

Candidates should apply to any recruiting officer of the Regular Army or to the medical officer of any military post or cantonment.

Enlistments are for the period of the emergency, unless sooner discharged.—Official Bulletin, Dec. 5, 1917.

New and Nonofficial Remedies.

Stanolind Surgical Wax.—A brand of paraffin for films melted at 47 C., being pliable at or below 25 C. and ductile at or below 29 C. Standard Oil Company of Indiana, Chicago. (Journal A. M. A., Nov. 3, 1917, p. 1525).

Acetylsalicylic Acid (Asperin) Monsanto.—A brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. Monsanto Chemical Works, St. Louis, Mo. (Journal A. M. A., Nov. 17, 1917, p. 1695).

Arsenobenzol (Dermatological Research Laroratories).—A brand of arsenphenolamine hydrochloride. Its actions, uses and dosage are the same as those of salvarsan. It is supplied in ampules containing 0.6 Gm. The General Drug Co., New York City.

Acetylsalicylic Acid-Milliken.—A brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. It is sold only in the form of 5-grain capsules and 5-grain tablets. Jno. T. Milliken and Co., St. Louis, Mo.

Silver Protein-Squibb.—A compound of silver and gelatin, containing from 19 to 23 per cent of silver in organic combination. Like other silver protein compounds, it is used in from 1 to 25 per cent, or stronger solutions for prophylaxis and treatment of the sensitive mucous membranes, particularly in gonorrhea, conjunctivitis and other infections of the urethra and of the eye, ear, nose and throat. E. R. Squibb and Sons, New York.

Paraffin for Films (Surgical Paraffin, Plastic Paraffin.—Paraffin intended for application to burns, etc., should be more ductile and pliable than the official paraffin, and be liquid at or below 50 C. Thin films should be pliable at or below 28 C. and ductile at or below 31 C. and somewhat adherent to the skin. Paraffin for Films is used mainly in the treatment of burns. It is used also to prepare "paraffin covered bandages" and to seal gauze dressings. In the paraffin treatment of burns, the wound is cleaned and dried; a thin coating of liquid petrolatum or melted paraffin for films is applied, and is followed by a thin layer of cotton and another layer of cotton; another layer of melted paraffin is applied, and the whole then bandaged.

Propaganda for Reform.

Adulterated Imported Drugs.—The U. S. Department of Agriculture announces action against imports of adulterated drugs. Belladonna root was adulterated with yellow dock; cantharides was adulterated with so-called Chinese blister flies, and cinchona bark offered for entry was deficient in alkaloid. Other drugs were illegally labeled. (Journal A. M. A., Nov. 24, 1917, p. 1792).

Shotgun Vaccines for Colds.—There is no reliable evidence for the value of mixed vaccines in the prevention or treatment of common "colds" and similar affections. The Council on Pharmacy and Chemistry accepted for New and Nonofficial Remedies mixed vaccines only on condition that their usefulness has been established by acceptable clinical evidence. So far it has not admitted any of the "influenza" or "catarrhal" mixed vaccines. (Journal A. M. A., Nov. 10, 1917, p. 1642).

Sphagnum Moss, A Surgical Dressing.—In England, sphagnum moss, or peat moss, is being used as a substitute for absorbent cotton. The dried moss is said to absorb twenty-two times its own weight of water, while absorbent cotton will not absorb more than six times its weight. For surgical use the dried moss is packed loosely in muslin bags which are then sterilized by heat or chemicals such as mercuric chloride. (Journal A. M. A., Nov. 24, 1917, p. 1790).

The Carrel-Dakin Wound Treatment.—Arthur Dean Bevan holds that the value of the Carrel-Dakin method of treating infected wounds has not been established. He has been forced to the conclusion that Carrel's work does not meet the requirements of scientific research. Bevan believes that the choice of antiseptics in the treatment of infected wounds is of little moment, and that the use of the Carrel-Dakin fluid, like Koch's lymph, Bier's hyperemia and the vaccine therapy of acute infections, will have a short period of popularity. (Journal A. M. A., Nov. 17, 1917, p. 1727).

The Handicap of Proprietorship in Medicines.—Dr. J. J. Mundell protests because his article on the present status of pituitary extract in labor was abstracted in "Therapeutic Notes" in a way which appears to him a gross misrepresentation of his attitude toward the use of pituitary extract. Being

a house organ, "Therapeutic Notes" contained only those portions of Mundell's article which may be expected to promote the firm's proprietary pituitary preparation. The references to the dangers and the limitations of pituitary extracts were not abstracted. Journal A. M. A., Nov. 24, 1917, p. 1818).

Salvarsan, Etc.—Besides the German salvarsan and neosalvarsan, now practically unobtainable, the Council on Pharmacy and Chemistry has recognized diarsenol, neodiarsenol and arsenobenzol (Dermatologic Research Laboratories). It has under consideration salvarsan made by the Farbwerke-Hoechst Company, New York. Before accepting these preparations, the Council requires evidence to show that the products are manufactured under supervision which may be expected to insure their chemical identity and uniformity, and freedom from toxicity. However, in the past, untoward effects have been reported from German salvarsan and neosalvarsen, particularly with the last shipments of neosalvarsan. Recently untoward effects have been reported from neodiarsenol. It is expected that within a short time all salvarsan, neosalvarsan and the various products identical with these will be tested by the government. (Journal A. M. A., Nov. 24, 1917, p. 1819).

Iodeol and Iodagol.—Iodeol and Iodagol (formerly called Iodargol) are the products of E. Viel and Company, Rennes, France. They have been widely and extravagantly advertised in the United States as preparations containing colloidal, elementary iodin, and with the claim, that, because of the colloidal state of the iodin, they possessed the virtues but not the drawbacks of free iodin. As the result of chemical examination, pharmacologic, bacteriologic and clinical investigation and a study of the submitted evidence, the Council on Pharmacy and Chemistry declared the products inadmissible to New and Nonofficial Remedies because they did not contain the amounts of iodin claimed; because the iodin was not in the elementary or free condition but behaved like fatty iodin compounds, and because the therapeutic claims were exaggerated and unwarranted. The American agents, David B. Levy, Inc., announce that the sale of Iodeol and Iodagol has been discontinued. (Journal A. M. A., Nov. 17, 1917, p. 1725,.

"Patent Medicines" Here and in Canada.—The federal law governing the interstate sale of "patent medicines" prohibits false and misleading statements in regard to composition and origin and false and fraudulent therapeutic claims. The Canadian law offers no protection against false, misleading or fraudulent statements that may be made for products of this class. As a result, many claims made for "patent medicines" when sold in Canada are not made when the same preparations are sold in the United States. An examination of Dodd's Kidney Pills, Doan's Kidney Pills, Williams' Pink Pills for Pale People, Paine's Celery Compound, Hall's Catarrh Medicine, Hood's Sarsaparilla, Dr. Chase's Nerve Pills, and Gino Pills as sold here and in Canada leads to the conclusion that the "patent medicine" industry as a whole is founded on falsehood, and that misleading and false claims will be made for such preparations, at least in the majority of cases, just so long as manufacturers are subject to no restraint except their own consciences. (Journal A. M. A., Nov. 10, 1917, p. 1636).

Bell-ans (Pa-pay-ans, Bell).—Bell-ans, formerly advertised as Pa-pay-ans (Bell), in medical journals, is now advertised in newspapers and in medical journals. Among the extravagant claims made for this preparation is the claim that there is no derangement of the digestive organs on which the proper dose of Bell-ans will not act quickly and pleasantly. Instead, proper treatment must aim to determine the cause and attempt its removal, the choice of drugs depending on the conditions that give rise to indigestion. The treatment of indigestion by a single prescription or combination is wholly irrational. While Bell-ans, under its old and new name, has been alleged to contain papain or to be some preparation of the digestive juice of the fruit of *Carica papava* with other substances, chemists have failed to find papain or to determine the digestive power of the tablets. Bell-ans is essentially a tablet of sodium bicarbonate and ginger, and has all of the virtues, which are few, and all of the limitations, which are many, of a tablet of sodium bicarbonate and ginger. The Council on Pharmacy and Chemistry examined Bell-ans nearly eight years ago, and the statements made in that report are as incontrovertible today as they were then. (Journal A. M. A., Nov. 24, 1917, p. 1815).

County Societies.

ARKANSAS COUNTY.

(Reported by E. B. Swindler, Sec.)

The offieers of the Arkansas County Medical Society, eleeted recently, to serve for the year 1918, are as follows: Dr. Homer Whitehead, Tiehnor, president; Dr. B. L. Hill, Stuttgart, viee-president; Dr. E. B. Swindler, Stuttgart, seeretary.

PRAIRIE COUNTY.

(Reported by J. R. Lynn, See.)

At the annual meeting, in Oetober, of the Prairie County Medieal Society, the following offieers were eleeted for the ensuing year: Dr. James Parker, DeValls Bluff, president; Dr. L. M. Crow, Des Arc, vice-president; Dr. J. R. Lynn, Hazen, secretary; Dr. W. W. Hipolite, DeValls Bluff, treasurer.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrenee County Medieal Society met Deeember 5, at Hoxie. The meeting was ealled to order by the president, Dr. J. S. Swindle. Minutes of the previous meeting were read and approved. Members present: Drs. W. W. Hateher, A. G. Henderson, J. C. Land, J. W. Morris, H. R. McCarroll, T. C. Neeee, W. J. Robinson, W. A. Smith, J. H. Stidham, J. C. Swindle and G. A. Warren.

The seientifie program was as follows:

"Whooping Cough," by Dr. W. W. Hateher.

"Typhoid Fever," by Dr. G. A. Warren.

"Pneumonia," by Dr. A. G. Henderson.

Followed by interesting and instructive diseussions.

Offieers elected for the ensuing year are as follows: President, Dr. G. A. Warren; viee-president, Dr. W. A. Smith; seeretary, Dr. H. R. McCarroll; delegate to the State Soeiety, Dr. W. W. Hatcher; alternate to the State Society, Dr. J. C. Swindle; eensor, Dr. W. J. Robinson.

The meeting then adjourned and all went to the Boas Hotel for supper. This was one of the best meetings of the year, all present seemed to enjoy themselves.

JEFFERSON COUNTY.

(Reported by Dr. J. T. Palmer, Sec.,

The Jefferson County Medieal Soeiety met in regular session Deeember 4, 1917, at Dr. Wm. Breathwit's offiee, with the following members present: J. T. Palmer in the chair, with Wm. Breathwit, seeretary pro tem.; Drs. Breathwit, Blankenship, Caruthers, Hankinson, MeMullen, Palmer, Pittman, Woodul, Troupe, Lowe and Lemon.

Under head of eommunications a request from the Surgeon General's Offiee requesting a serial report relative to oeeupation and degree of sueeess by cripples. A motion was earried to the effect that all members report sueh eases to the offiee of the Surgeon General.

Under elinical cases, Dr. Lemon reported a ease of a young man injured by a falling log, whieh produeed wide area traumatized over baek with extravasation, retention of feces and urine, with other symptoms of spinal injury. X-ray was negative, and under expeetant treatment patient made good reeovery. Extravasation was not aspirated but was absorbed. Dr. O. G. Hankinson reported an interesting case of perirectal hemorrhage, operated with very interesting after-results, in that the patient made good recovery.

The election for 1918 followed: Dr. W. H. Blankenship and Dr. A. W. Troupe were nominated for president. On ballot Dr. Blankenship was elected. Dr. C. K. Carruthers was elected vice-president, Dr. J. T. Palmer, seeretary-treasurer, and Dr. J. M. Lemon was eleeted delegate to State Society.

A nice luneh was served and the soeiety adjourned.

Book Reviews.

HOW TO RUN AN AUTOMOBILE.—By Victor W. Page, M. E. Illustrated with seventy-two specially made diagrams and authoritative photographs furnished by leading automobile manufacturers, showing actual parts, all in correct proportion. Published by the Norman W. Henley Pub. Co., 132 Nassau St., New York. 1917. Price $1.00.

This eoncise, practical book, written in simple language, presents an absolutely nonteehnieal eomplieation of the operating instruetions of leading automobile manufacturers with whieh the ear owner should be familiar.

THE PHYSICIAN'S VISITING LIST FOR 1918.—Sixty-seventh year of its publication. By P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, Pa. Regular edition, 25 to 100 patients per day or week, $1.25 to $2.50.

In addition to the spaee for a complete memorandum of patients we find a very useful dose table. It gives the doses of official and

unofficial drugs and preparations in both the apothecaries and metric systems, in accordance with the U. S. Pharmacopeia, ninth revision and the National Formulary, fourth edition.

Practical Materia Medica and Prescription Writing With Illustrations.—By Oscar W. Bethea, M. D., Ph. G., F. C. S., Assistant Professor of Materia Medica and Instructor in Prescription Writing, Tulane University of Louisiana. Second Revised Edition. Published by F. A. Davis Company, Philadelphia, Pa. 1917. Price $4.50.

The book admirably serves its purpose in such a practical way to render the work a dependable one for the man in general practice to the most exclusive specialist. It is up-to-date, with reference to the pharmacopeial changes. Much new matter has been added and it is hoped it will prove of value.

Handbook of Gynecology for Students and Practitioners.—By Henry Foster Lewis, M.D., and Alfred de Roulet, M. D., Chicago. 452 pages with one hundred seventy-seven illustrations. Published by C. V. Mosby Company, St. Louis, Mo. 1917. Price $4.00.

This book should prove of particular value to senior medical students and the young practitioner who has not yet settled into a special field. Chapter III, on "Diagnostic Methods," describes history, physical findings, abdominal examination, differentiation of abdominal swellings, tumors, ascites, vulvovaginal examination and instrumental examination.

Practical Treatment.—Volume IV. By 76 eminent specialists. Edited by John H. Musser, Jr., M. D., Associate in Medicine, University of Pennsylvania, and Thomas C. Kelly, M. D., Instructor in University of Pennsylvania. Desk index to the complete set of four volumes sent with this volume. Octavo 1,000 pages, illustrated. W. B. Saunders Company, Philadelphia. 1917. Cloth $7.00 net; Half Morocco $8.50 net.

This volume has been brought out for the purpose of giving the various contributors opportunity of making in their articles such change or modification as have occurred in the therapeusis of those diseases, the treatment of which they have already detailed. The contributors are among the leading medical men in this country.

Poliomyelitis in All Its Aspects.—By John Ruhrah, M. D., and Erwin E. Mayer, M. D. Baltimore, Md. Illustrated with 118 engravings and two plates. Published by Lea & Febiger, Philadelphia. 1917. Price $3.25.

The authors of this volume present the facts concerning poliomyelitis as far as they are known at the present time and give briefly such theoretical considerations as may seem to be either of interest or importance. They call attention to one point which has not been decided, and that is the length of time that the paralysis may exist in poliomyelitis. They believe the loss of power may be exceedingly transitory and may last only a day of two or three days.

The Roentgen Diagnosis of Diseases of the Alimentary Canal.—By Russell D. Carman, M. D., Head of Section on Roentgenology, Division of Medicine, Mayo Clinic, and Albert Miller, M. D., First Assistant in Roentgenology at the Mayo Clinic. Octavo of 558 pages, with 504 original illustrations. W. B. Saunders Co., Philadelphia. 1917. Cloth $6.00 net; Half Morocco $7.50 net.

This book should prove to be of unusual value to the physician and of great practical service to the workers in the field or roentgenology. The authors present in a systematic manner those things which seem not only to be true but worth while, and especially those which they have verified by experience with a large amount of material.

The Elements of the Science of Nutrition.—By Graham Lusk, Ph. D., Sc. D., F. R. S. (Edin), Professor of Physiology at Cornell Medical School, New York. Third edition, reset. Octavo of 641 pages, illustrated. W. B. Saunders Company, Philadelphia, Pa. 1917. Cloth $4.50 net.

The aim of this book is to review the scientific substratum upon which rests present-day knowledge of nutrition, both in health and disease. The contents are classified into twenty-one chapters, as follows: Introductory; The Atwater-Rosa Respiration Calorimeter; Starvation; The Regulation of Temperature; The Influence of Protein Food—Part I, Nitrogen Equilibrium; the Influence of Protein Food—Part II, The Intermediary Metabolism; The Influence of Protein Food—Part III, The Respiratory Metabolism; The Influence of the Ingestion of Fat; The Influence of the Ingestion of Carbohydrate—Part I. The Intermediary Metabolism; The Influence of the Ingestion of Carbohydrate—Part II. The Respiratory Metabolism; The Influence of Mechanical Work on Metabolism; A Normal Diet; The Nutritive Value of Various Materials Used as Foods; The Food Requirement During the Period of Growth; Metabolism in Anemia, at High Altitudes, in Myxedema and in Exophthalmic Goiter; Metabolism in Diabetes and in Phosphorus-Poisoning; Metabolism in Nephritis, in Cardiac Disease, and in other Cases involving Acidosis; Metabolism in Fever; Purin Metabolism—Gout; The Influence of Certain Drugs Upon Metabolism; Food Economies.

DR. ROGER'S *Tycos*, SELF-VERIFYING SPHYGMOMANOMETER

$25.00

We Give Laboratory Service

That Really Helps in Diagnosis

Directions for Procuring Specimens.

Proper Containers.

The Most Precise and Accurate Technic. Interpretation Based upon Wide Experience.

Wassermann Test plus the *Hecht- Gradwohl* Test, the Test that adds 20% to the accuracy of Complement Fixation.

Tuberculosis Complement Fixation Test: A Blood Test of great helpfulness in the early diagnosis of tuberculosis. useful in Arthritis, chronic infections in the uro-genital tract.

Tissue Examinations, *Vaccines, Blood-Chemical* Tests.

We make every Laboratory test of Merit.
Free Containers, free literature. Write us.

Gradwohl Biological Laboratories

928 N. Grand Ave., St. Louis, Mo.

R. B. H. GRADWOHL, M. D. Director

Calcreose

The therapeutic value of creosote is well known and has long been recognized. Its use has been neglected largely because of the difficulties of administration. Calcreose, a chemical combination of creosote and calcium (contains 50% creosote) overcomes many of the objections.

Calcreose is of value in the treatment of bronchitis, especially the bronchitis associated with pulmonary tuberculosis, and in gastro-intestinal infections.

Formulae and Price List

Calcreose Powder. A reddish brown powder, containing 50 per cent. creosote in combination with calcium — Per pound, $3.00

Calcreose Tablets, coated brown, 4 grs., — 100, 35c.; 500, $1.55; 1000, $3.00.

Calcreose has been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in "New and Nonofficial Remedies."

Calcreose is carried in stock by wholesale druggists; also supplied to physicians direct We ship charges prepaid Literature and samples free to physicians.

As high as 120 grains of Calcreose has been given daily without digestive disturbance

The Maltbie Chemical Co., Newark, New Jersey

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. Little Rock, Ark., January, 1918. No. 8

Original Articles.

MY INTERESTING EXPERIENCE AT THE COUNTY HOSPITAL AND REPORT OF CASES.*

By A. L. Carmichael, M. D.,
Little Rock.

It was my privilege and pleasure, with those of other departments, to assist Dr. Pettus in developing the Staff Service at the County Hospital. My interest was so aroused and the work so attractive that it was with reluctance I ceased to regularly visit the hospital after serving my time. Through the courtesies of the present physician, Dr. Wilkes, who is now serving, I find myself going out to the hospital studying and discussing cases with him. Dr. Wilkes has made it possible to further study some of the interesting cases I wish to report and his assistance has been of great value.

I discovered such interesting cases there, I wish to have you enjoy them with me, and I hope to be able to report as interesting to you as they were to me.

The association with members of the other departments of the Staff was pleasant and exceedingly valuable. If my report is interesting I wish to credit them with a considerable share of time and effort in perfecting these reports.

Case No. 1.—Miss M. G. White, age 40. Occupation, school teacher. Admitted July 24, 1916. Family history, father died at age of 62, cause unknown. Mother died at age of 56, cause of death reported as rheumatism. No brothers or sisters. Personal history, had the following diseases of childhood, measles, pertussis, diphtheria and mumps. Has had several attacks of tonsillitis and one or two attacks of malaria. Had typhoid in 1911. Has had influenza.

Menstruation began at age 14, was always regular and of the 28-day type.

History of present illness, began two years ago with a jaundice and severe pain in region of gall bladder and under right shoulder blade, has been attacked with frequent nausea and vomiting. Last summer the vomit was frothy and white. Suffers greatly with indigestion and constipation. This is the history as taken by one of the interns.

On January 12th, 1917, I visited her and found that she was just recovering from an attack that began with a chill, followed by a temperature of 102 F. to 104 F. No history of nausea or vomiting with this attack. The eyes and skin were icterus, not markedly jaundiced. Eyes, nose and ears negative. The teeth were in bad condition and a marked gingivitis.

She was poorly nourished and complained of being weak. The heart and lungs were negative. Abdomen flat and only slight tenderness in region of gall bladder. Spleen not palpable. Reflexes apparently normal. A blood examination was ordered, and the following report. Blood negative for malaria, with an increase in polymorphonuclears. A total count was not made. Examination of urine was reported negative.

She continued to improve. In a very few days the temperature was normal, but the icterus continued. From this she was up and did some light work but continually complaining of indigestion, some days feeling fairly good, at other times not so well.

At about midnight on Feb. 25th, patient had a chill, followed by a temperature of 105 F., became extremely jaundiced, some nausea and vomiting.

Blood was examined again at 10 a. m. and 5 p. m. Report, no malarial organisms found, Leucocytosis, marked increase in polys. Very slight tenderness over gall bladder, nothing else was found. On the 28th, the urine showed a trace of albumen but no casts. A diagnosis of cholecystitis was made and patient advised to consult a surgeon. Drs. J. L. Dibrell and Scarborough visited her and concurred in the

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

opinion. This attack had about the same symptoms and duration as previous ones and in a few days she was up and about again. On March 7, 1917, she was operated by Dr. Strauss.

DIAGNOSIS:

Obliterated Gall Bladder.

AUTOPSY:

Completely obliterated Gall Bladder.

Case No. 2.—W. L., colored, male, age 36; occupation, day laborer; widower. Admitted April 4th, 1917.

Family history: Father was killed at about age 65. Mother died at age 53 with "congestive chills." One brother killed at age 9. Three sisters living, all in good health.

Personal history. Has had diseases of childhood, as follows, measles, mumps, diphtheria, has had tonsillitis and rheumatism. Had pneumonia two years ago and typhoid 5 years ago. Had gonorrhea two years ago and a chancre four years ago. Left leg broken above knee in 1909. Is the father of one child which is four years of age. Wife died with hemorrhage of uterus at her following pregnancy and was about six months advanced. History of personal and present illness. Began in December 1916 with a tired feeling, unable to work, shortness of breath, swelling of feet, dizziness, cough, which is not productive. Has to sit up in bed to sleep. Does not urinate as much as heretofore. Complains of indigestion and constipation. Sleeps very little. Pain at internal border of left scapulae and over precardia.

Physical examination. Inspection shows a fairly well nourished condition, quite marked anemia, together with blueness of lips and finger nails. Extreme distress from dyspnea, swelling of feet, legs, abdomen and hands, only slight puffiness of face. Scalp, eyes and ears negative. Throat apparently negative except an anemia. Teeth in bad condition, especially the molars, both upper and lower. Pulsation of carotids. Chest negative except the dyspnea, and forceful heart action and larger on left side than right. "Pistol-shot" heard at elbow of right arm; but could not be heard at any other point.

Palpation reveals a slight thrill over the precardia; fluid in abdomen; extremities cold and moist. Pulse ranged from 94 to 120. A typical Corrigan's pulse. B. P. Systolic 180 m. m. Diastolic 80 m. m. Heart lead 125%. Percussion of chest reveals lungs negative. Marked hypertrophy of heart transversely.

Auscultation. Lungs negative except large mucous rales heard during both acts of respiration, posteriorly and anteriorly.

Heart, a presystolic and systolic murmur heard at apex, a systolic murmur at the right and left second intercostal spaces. Marked arythmia.

Blood examination was negative except showing an anemia.

Urine, on repeated examinations showed a specific gravity of 1032; no sugar. Marked reaction of albumen and a variety of casts; normal number of leucocytes and numerous red blood cells.

DIAGNOSIS:

Classic rheumatic heart, and stenosis mitral inefficiency.

A blood examination on April 29th, showed an eosinophilia of 13%. An examination was then made of the feces, which was negative.

Case No. 3—In reporting my interesting experiences at the hospital merely as a complement to surgery, and the impression made upon me, the wonderful retributive powers of the patient and the little effect an operation would have on the patient, I thought it might be of interest to report this case along that line. It almost appealed to me as a psychological condition.

A female, 28 years old, having suffered for many months with a decided pain on the left side, having been ushered in with her first menstruation and gradually growing worse, to the point that she was willing to submit to any ordeal for relief. I was present at the operation, understood the doctor to announce he found an adhesion of the sigmoid, which was released. The uterus, he claimed, was retro-displaced, which he remedied by slitting down the round ligaments, denuding the fundus and there sewing together, holding the uterus in place. The left tube was slightly involved. Removed it, as well as the right tube, which was considerably distorted; also an ovarian cyst on the left side and the appendix, which was bound down with considerable adhesions.

Walking into her room the next morning I was never more amazed to find her smiling and as cheerful as if she had just returned from church.

The length of time to do such an operation and the amount of destruction that is un-

doubtedly necessary to complete the work, to me makes it more interesting, seeing what little effect the operation seemed to have on her.

While this is, I am sure, of no interest to the surgeons, as I presume all who are doing this work have the same experience; but to those of us who are dealing more exclusively with the administration of drugs, we can but acknowledge and respect the extended amount of tissue distributed with such little shock. The appearance of the patient on the next morning so attracted me that I virtually saw her each morning until she left, and at no time did I hear one complaint.

Case No. 4.—Clarence Stroud, male; negro; age 30; occupation, mortar mixer; widower; admitted April 10, 1917.

Family history. Father unknown, mother is living, aged 75; in fairly good health except rheumatism in knees and hands and shoulders. Mother has had five children, four boys and one girl, all living, in good health, ages from 30 years to 19, no miscarriages.

Personal history. Had measles and whooping cough when a child, had smallpox five years ago. Had light chills every other day for about six weeks in the fall, 1916.

Venereal history. Had a discharge from the urethra in 1907, of a yellowish nature, but discharge ceased in about a week. About three months after the beginning of the discharge he had pains in his arms and legs, beginning in the arms and extending into the lower extremities. At the same time of the discharge from the urethra he had three or four sores on foreskin, which he claims to have healed up with some caustic; but was four months in getting them well. He comes complaining of shortness of breath, unable to work on account of same, tiring easily.

Physical examination. Inspection shows well nourished negro, but edematous from head to foot, but the swelling began in the feet. He is anemic but not cyanotic; extremities cold and moist, pulsation visible in the neck, a palpable thrill, also at the bends of the elbow and the popliteal spaces. On auscultation of heart shows marked hypertrophy transversely; apex beat one inch outside of nipple line in the fifth interspace. He has a systolic murmur, heard best at the apex, transmitted clear around under the scapular. He also has a presystolic murmur heard best at the base of the heart, a musical murmur at the right second interspace, which is diastolic in time. A typical pistol shot can be heard in the axillae all down the artery of the arm to the wrist. The same is true of the lower extremities.

Wassermann was 4x positive.

Case No. 5.—Lelia Yerby female; negro; Canadian nationality; 38 years of age; widow; occupation, hair dresser; admitted February 25, 1917.

Family history. Father died at an unknown age of unknown cause; mother died at 63 with pneumonia; three sisters living, in good health; two brothers living, in good health.

Personal history. Had the usual diseases of childhood; had pneumonia when eleven years of age; has been married twice; has had two miscarriages, about two months advanced; one miscarriage with the first husband and one with the second. These miscarriages were about three years apart; has not menstruated for about two years; had chills and fever while in Canada, which was about eighteen years ago; has had no chills and fever since; has averaged drinking from one pint to a quart of whiskey a day for the past eighteen years. Denies specific infection.

History of present illness. Began about 1st of January, 1917, with loss of appetite, nausea, vomiting and constipation. She noticed about two or three days after these symptoms having cramps in the muscles of the lower limbs and also a tingling and burning pain in the bottoms of the feet and palms of the hands. Had no special pain at this time, but in just a few days she noticed that she could not stand or walk, legs would not move in the direction she wanted, had pains in the hips and lumbar region and sharp shooting pain through the abdomen. She walked with two crutches for a time and finally became so she could not walk at all. She had a diplopia.

On inspection. Hair had been dyed and is now losing its artificial color, skin over face has splotchy appearance, some scars on both tibia. As to inspection, heart and lungs negative; pulse 102 per minute, low volume and tension; it was regular. Eyes: pupils equal in size now, circular and regular in outline. There is apparently no reaction to light, but they react on accommodation; ocular movements are free and easy, but there is a history of diplopia having been present. Eye grounds are easily seen and are negative, fa-

cial muscles react normally; oral cavity is well kept; many gold teeth; gums appear to be healthy; reflexes upper deep equal on both sides and negative; patellas are not elicited, plantars negative; tendons to drop foot; scars from old ulsers on both shins; urinary incontinence described as a dribble; hearing 40/40 both ears; dynamometer reading, right hand, 5 kys.; left, 10 kys. She is right-handed. Sensation tactile; muscular sense of position and temperature senses seem normal; a considerable loss of power in lower limbs, especially in flexors and extensors; toes can barely be moved; co-ordination is disturbed and cannot be well tested on account of muscular weakness; examination is otherwise negative. The history of syphilis is, of course, suggestive and is no doubt the cause of her present trouble. A positive Wassermann fluid is reported 4X. A cell count was not made.

On April 7, 1917, 1/50 grain of mercurized serum was given subdurally and in three days patient was up walking in the ward. On April 30, 1/25 grain was given, and, of course, we have not had time to observe results from this dose. Wish to state, however, that she is taking by the mouth mercury and iodide of potash to the point of saturation; was referred to Dr. Fletcher, who will discuss the case.

Case No. 6.—Napoleon Goodloe; male; negro; age 19; occupation, laborer; single; admitted February 9, 1917.

Family history. Father living, 49 years old, in good health; mother died 14 years ago of poisoning; two half-brothers living, one and three years old respectively, both in good health, no brother or sisters dead.

Personal history. Has had measles, pertussis, denies venereal history; was operated on by Dr. W. A. Snodgrass four years ago for suppurating cervical glands of neck, said to have been tubercular; shows a scar two inches long on both sides of neck at the present time.

History of present illness. Began one month ago with an influenza, which was followed one week later by earache and in five days pain, tenderness and swelling over the mastoid region of right ear. This was operated on by Dr. May on February 10, 1917.

Physical examination. Inspection showed a very well nourished but tall, slender yellow negro; scalp normal; under the left eye has quite an area of lumps; palpation of lungs and heart were negative, also negative on percussion and auscultation; abdomen negative. On the 14th of February, 1917, his urine showed a specific gravity 1022, negative for albumen and sugar. Blood on the 15th showed small lymphocytes 30%, large 10%, polymorphonuclear neutrophil 54%, basophiles 4%. Dr. May then did a radical operation and will report his findings.

Case No. 7.—Samuel Jones; white; male; age 72; widower; occupation school teacher; admitted March 7, 1917.

Family history. Father was killed at the age of 40 years; mother died at age of 70, with apoplexy; no brothers; had three sisters; their history is unknown.

Personal history. Had most of the diseases of childhood; had smallpox when young; pneumonia at 14 years of age; chills and fever nineteen years ago; said he had gonorrhea twice, once when about twenty years of age and again twenty years ago; has had three attacks of sciatic rheumatism of the left leg; had one bad attack of so-called muscular rheumatism about ten years ago; claims to have never suffered with headache, but has noticed for the last fifteen years having to get up at night to void urine and at times an apparent inability to retain urine. Present illness began about the latter part of December, 1916; was attacked with nausea and vomiting while in a picture show, which he attributed to the overheated room. Since that time has not been well; the vomitus was yellowish in color, very acid but of small amount; has no appetite, cannot eat solids without being nauseated; tires easily on exertion and is not constipated; noticed swelling, first of the face, then of the abdomen, and later feet and hands; still complaining of frequent micturition and dizziness, and says now he has some headache.

Physical examination. Inspection shows patient is fairly well nourished, head negative except edema of face and especially upper and lower eyelids, chest negative on inspection except the cardiac impulse is noticed one inch outside of the nipple line and the fifth interspace; the abdomen is distended with fluid, considerable swelling of both feet and legs; color is typical of old chronic interstitial nephritis. On palpation find marked edema from the face to the ends of the toes; skin is dry and scaly, some tenderness in abdomen, especially the lower right quadrant. Blood pressure when entered was systolic 220, diastolic 100. On April 29, his blood pressure was 150 systolic, 80 diastolic. While there is

a marked variation in the pressure, you will notice the heart load remains about the same, between 87½% and a little better than 100%. On percussion find lungs negative, heart enlarged to patient's left, which is suggestive of a left side heart movement. On auscultation of heart we hear a soft blowing murmur, systolic in time, heard in the mammary line in the fifth interspace, transmitted to the axillae. Lungs are negative on auscultation. On March 27, 1917, his urine showed a specific gravity of 1016, a marked reaction of albumen; no sugar; with acid reaction; color, brownish yellow, with a reddish sediment, and showed numerous red blood cells under the microscope. On the 20th of April, another urinary examination showed a specific gravity of 1020, more positive in reaction of albumen and no sugar, with an acid reaction. This specimen under the microscope showed red blood cells, numerous casts, coarse granular and hyaline and a few fatty casts found. Blood examination on the 27th of March was negative for malaria; Wassermann negative; differential count showed 37% small lymphocites, 20% large, 41% polys. and 2% basophiles. Diagnosis: Chronic interstitial nephritis.

DISCUSSION.

Dr. E. H. Wilkes, Little Rock: Having been asked to discuss two of the cases reported by Dr. Carmichael, chronic interstitial nephritis and aortic stenosis, I felt that it would be best to prepare my discussions in order that I might make my points clear, and my discussions would be more forcible.

Case No. 7, that of Prof. Jones; the part of the history in this case that is interesting is about the latter part of December, 1916, he was suddenly attacked with nausea and vomiting while in a picture show. He attributed these disagreeable symptoms to the overheating of the house, but since that time he has not been well.

There the question arises, is it acute or chronic nephritis? We know from a clinical point of view that there are two types of acute Bright's Disease. One which comes on by an abrupt frank onset with an edema, pallor, headache and gastric disturbances, and by such a scantiness of urine and change in color from admixture of blood as commonly to attract the attention even of the patient or the nurse to the fact that there is something wrong. The other type is less frank in its manifestation; although the onset may be sudden, there is no marked edema or pallor of the skin, there is no complaint of headache, no nausea or vomiting and the urinary change is only revealed by a close watching of the amount of urine and by a chemical and microscopic study.

That is the history of acute Bright's Disease, which history, considering the frank type, delightfully fits in this case. But on further questioning the patient, he states that for an interval of some weeks, possibly months, he noticed swelling of his feet. It was not of sufficient amount to create any impression on his mind and he noticed that it occurred only after excessive exercise or overeating. During the first part of December, the edema was of more magnitude, involving both ankles, abdomen and face. It was more marked in the left ankle than in the right. A physician was consulted on February 10, 1917, and he entered the hospital on March 7, 1917.

I shall discuss the acuteness or chronicity, not because I consider it of such scientific wonder but because there is a difference of opinion as to the advancement of nephritis, and in many instances a disputed difference (I speak of symptoms). In this case one might think seriously that it was an acute attack, and on its face would justify such suspicion. In considering his age, the progression of the disease, his general appearance, edema, etc., I could not consider other than that it was chronic nephritis, which manifested itself on the slightest provocation of overeating and a neglect of keeping the secretions properly acting.

That is the common history with chronic interstitial nephritis, not even suspecting they have the least kidney involvement, to be apprised of it abruptly. His heart condition is interesting and typical of Bright's Disease. If I had doubted the chronisity of the condition, his heart would have lessened my suspicion. From a superficially clinical standpoint, the most attractive symptom was that of his heart. To term the heart a complication in Bright's Disease I hardly consider correct, as in the strictest sense, cardiac incompetency and dilitation may be regarded as the natural sequences of the disease. The failing heart so often dominates the picture and so often modifies the course of disease as really to justify its being regarded as a complication.

In closing my discussion of the phase as to the stage of the disease, I may emphasize that I was not in doubt one moment as to the stage of the disease after examining the heart.

The second case, aortic stenosis, I do not feel competent to discuss. In confidence, I will acknowledge to you this is the first case that I ever saw which I really believed was aortic stenosis. With the backing of Dr. Carmichael, I with impunity, will discuss it on the basis of our diagnosis.

Aortic Stenosis is the least of all cardiac diseases, and is frequently diagnosed when it does not exist. An interesting fact is the degree of constriction to which the orifice may shrink and yet allow the patient to live. This I accept from the reports of those who have examined the heart after death.

Quoting from those who have studied the disease, if the constriction advances slowly enough the cardiac muscle will grow up to the work, even in spite of obliterated coronary orifices. In some of old age, the blood seems finally to have been driven through an orifice as small as a knitting needle.

As a rule the process is chronic, but in few cases one meets with an acute stenosis due to the growth of very luxuriant vegetation on the valves. Dr. Carmichael brought out a characteristic symptom, the pistol shot sound found at elbow and popliteal space.

This was very interesting to me. Dr. Tice in the medical clinics of Chicago, July, 1915, gave three cardinal signs in clinical recognition of aortic stenosis, which is worth mentioning at this time. First, the systolic thrill over the base of the heart; second, systolic murmur in the aortic area transmitted upward in the direction of the current of the blood, and, third, interferences with the pulse, that is, the pulse is decreased in volume, slightly slower, gradually filling and collapse. One of the misleading suggestions of aortic stenosis is any loud murmur at the base; that is considered by many as a symptom when as a fact, it is the least lesion which should create the suspicion it is aortic stenosis.

Dr. George B. Fletcher, Little Rock: I would like to discuss briefly case No. 5, tabes dorsalis. Not this

case in particular, but syphilis in general. Of course, tabes dorsalis is caused by syphilis, and nothing else, as is outlined here. This case, of course, offers no difficulty to discover the etiology—plain lues. The loss of reflexes, the loss of sensation, such as pain, temperature and co-ordination in the lower extremities, with Argyll-Robertson pupils, plus 4X positive Wassermann on the spinal fluid. The administration of neosalvarsan intravenously seems to have given no results. The results cannot be definitely worked out until the spinal fluid has been examined again. Unfortunately, differential spinal cell count was not made upon the spinal fluid.

This brings up the matter of the importance of early diagnosis in tabes dorsalis and other syphilitic conditions of the central nervous system. I have no doubt, had this case been seen two or three years ago before she ever gave history of syphilis, that a diagnosis of lues could have been made at that time. It is quite probable that the patelar tendon reflex had not been lost so long before it was necessary for her to go to bed. But the patellar tendon reflexes are not the first that are usually lost, but usually the lower tendon reflexes are the first to disappear. I want to emphasize the importance of examining the Achilles reflex, in the study of syphilis of the central nervous system; because after tendon Achilles reflex is lost, quite a time usually elapses before the characteristic signs indicate that the patellar tendon reflexes have been lost. In the case the Argyll-Robertson pupil with a history of diplopia, although the ocular movements were reported free and easy in all directions, still this case, with that set of eye symptoms would suggest to any of us syphilis or some other nerve involvement. At that time when it was first discovered or observed, no matter how strong a heart and lungs she may have had, we are not justified in overlooking the pupillary reaction. Her spinal fluid should have been examined; and the spinal fluid should be examined in all cases where there is the symptom of Argyll-Robertson pupil. By examination of the spinal fluid, I mean this: The spinal fluid ought to be examined and its condition whether clear or clouded should be considered; the cell count ought to be made; the number of lymphocytes ought to be known. The Wassermann reaction ought to be made upon the spinal fluid; the Noguchi butyric acid test and the globulin test given. In this way, and in this way alone are we ever able to diagnose early these cases of syphilitic involvement of the central nervous system. We know that the tissues are involved in the central nervous system. We know that the nerves are involved to the extent that we have lost the patellar reflexes; lost sensation; we know that it is no longer capable of regeneration. But we do know also that if we can get the case early enough we can recognize the oncoming tabes dorsalis, and very frequently in these spinal cord diseases we can by proper treatment forestall a very serious condition. The administration of salvarsinized serum, or mercurized serum, begins a definite, determined anti-syphilitic treatment, the spinal fluid is shown to be clearing up; the leucocytes drop in number, the Wassermann index goes down, and we are able to get some results in these cases, as demonstrated by our laboratory findings.

Dr. W. M. McRae, Little Rock: I don't want to discuss any special feature of the paper that the doctor read, but just in general. We certainly must be impressed with the many and varied manifestations of syphilis that are brought out in this paper that Dr. Carmichael read. I remember reading once, when I first commenced to study medicine, an expression of Dr. Osler, "Learn all you can about syphilis, and all other knowledge shall be added unto you." I think that is the substance of it. That held out a promise to me that I never forgot, and I always tried to learn all I could about syphilis. I never really felt the significance of that expression until I commenced to study the various manifestations of syphilis, and then I knew what Dr. Osler meant, that if you look for the various manifestations of syphilis in every patient that you examine, you will stumble upon a lot of other things that you are not looking for. So, I believe that is what he meant when he said, "Learn all you can about syphilis, and all other knowledge shall be added unto you."

Dr. Carmichael (closing): In a discussion of these cases, I think it best to follow Cabot's Classification, which he divides into four main classes or gronps.

First, the rheumatic hearts, which almost invariably start off as cases of mitral insufficiency and later a stenosis; second, the nephritic hearts, and these are almost always murmurless hearts, with a high blood pressure; then there are the syphilitic hearts, which are almost always aortic affairs, though some are myocardial affairs because the spirochetes have quite a tendency to lodge in the myocardinm. Then there are the arteriosclerotic hearts, part and parcel of a widespread cardio-vascular disease.

I think it well, when we first examine a heart, to ask ourselves, "To which of these four groups does this particular heart belong?" The answer will help us much. For instance, in a nephritic heart we have our hypertrophy altogether in the left ventricle which causes a hypertrophy to the left. In the rheumatic hearts we have hypertrophy transversely, but an enlargement to the right as well as left. In the syphilitic hearts we have an enlargement vertically; in other words, instead of finding the cardiac impulse outside of the nipple line and in the fifth interspace, we most always find the cardiac impulse in the seventh interspace and within the nipple line

Another thing of very much importance is the time of the day that these patients notice their edema. If the edema is noticed early in the morning or early morning hours, the conclusion is that it is a cardiac edema; if the edema goes down in the night, it is almost always a cardiac edema; if it accumulates in the night and goes down during the day, it is almost invariably renal in origin.

Another thing: We should be able in most cases to make a diagnosis of a heart trouble just by feeling the pulse. It is true that mitral insufficiencies do not cause or produce any change in the pulse; but in mitral stenosis we always have a marked arythmia and in an aortic insufficiency we have the typical Corrigan pulse or "water-hammer," as it is better known.

Now, some may ask, "Why in a mitral stenosis do we have arythmia?" When cases of heart block first began to be studied, it was found that they occurred frequently in a mitral stenosis. It was found that in this variety of rheumatic endocarditis the sino-auricular nodes and the bundle of His which passes down in the auriculo-ventricular septum became involved in the rheumatic inflammatory process, and the result is the arythmia which occurs. It does not occur in aortic lesions because the focus of infection there is farther away from the sino-auricular nodes and the bundle of His; consequently, then, in cases of aortic stenosis we do not expect inequality, but where the disturbance is on the mitral flap, it is possible for infections of the bundle of His to take place fairly early, and, hence, arythmia may occur fairly early. This is the way in which I think we ought to explain these phenomena which we find present.

Now, in listening to the heart, there are two things you must always pay attention to, the sounds and the murmurs; and the heart sounds are even more essential as diagnostic aids than the murmurs. In a mitral insufficiency there is marked accentuation of the second pulmonic sound, for example; and in mitral stenosis there is a marked accentuation of the first apical sound. This last phenomenon has long been explained in this way, and I think perhaps the ex-

planation is correct: In a mitral stenosis, where the mitral valve is narrowed, the blood is admitted slowly into the left ventrical, which cannot get full charge in the time at its disposal. The result is that when the ventricle begins to contract, it is not completely distended with blood; hence, during the first beginning of the ventricular contraction, the heart muscle races, especially the muscle of the ventricle, until suddenly the muscle closes down on the contained blood and closes the mitral flaps and suddenly opens the aortic valves, thus suddenly dilating the conus arteriosus. During the first part of the ventricular contraction, the muscle does no work, and then, all of a sudden, after meeting with no resistance, it meets with a great resistance when it begins to contract upon the contained blood. Is there any wonder of the sudden closure of the mitral flap? Hence, in mitral stenosis cases an accentuation of the first sound is observed very early, this accentuation being so great as to lead to what is sometimes called a "rolling" apical first sound. Another thing that is observed early is an accentuation of the pulmonic sound. Why? Because in mitral stenosis the narrowed valve dams back the blood and so raises the pulmonic artery pressure to such an extent that the back-wash from the lungs shuts the pulmonic semilunars with a bang.

Another question may be asked: "Why, in rheumatic hearts, we have an involvement of the mitral valve?" We used to think that the bacteria came along and camped out on the edges of the valves and there set up their nefarious work. Of course, that is perfect nonsense, because no bacteria can resist that terrible current. It has been shown by Rosenow that these infections take place just beneath the auricular surfaces of the mitral valves. The bacteria make their way into the coronary arteries, thence through the finer arterioles to the point of least resistance on the auricular side of the mitral valves; but beneath the surface they begin their nefarious activity, producing an inflammation which spreads over the valve edges. The first effect is invariably the same, a leak in the valve; hence, mitral insufficiency always precedes mitral stenosis; the leak antedates the narrowing. There is almost no such thing as a pure mitral stenosis; because stenosed valves never fit accurately; they cannot fit, and so they leak 100 times in 100 cases. Yet all mitral insufficiencies do not lead to mitral stenosis.

SHALL THE DOCTOR TELL THE TRUTH?*

By Thad Cothern, M. D.,
Jonesboro.

About two and one-half years ago I read an article on the above named subject by Julian W. Brandeis, editor of "Medical Pickwick." The subject, ever since, has been recurring to me at more or less frequent intervals; so to get shut of it I have adopted one of Mark Twain's tactics and that is "to pass it on." I know of no more long-suffering or patient bunch to pass it on to than to those present at this session of our society.

*Read by title before the Arkansas Medical Society, at its Forty-first Annual Session, Little Rock, May, 1917.

Quoting Mr. Brandeis: "One night a short while ago I was called to see a stranger and I was ushered promptly into his room with no further comment about his illness than the information given me by his wife at the door that he was very ill. She put off my further questions, saying that she was unwilling to alarm her husband by any conference outside his hearing. I entered the room to confront a very sick man. The evidences of extremity were plainly marked on him as he sat propped up in bed against the pillows—the blue skin, the short breath, and the heavy bags beneath his eyes.

"I prepared myself mentally for a difficult campaign and as I sat down at his bedside I took his hand to greet him, intending at the same time to study his pulse. But he detained my hand in his palm for a moment and looking me straight in the eye, said to me with apparent calm: 'Doctor, if I am in immediate danger I want you to tell me so frankly when you have finished your examination, as I have important affairs to straighten out with my lawyer.'

"For just a moment I was staggered. Then, I hope without any visible hesitation, I replied: 'Well, sir, I prefer to wait—to defer my examination for half an hour or an hour, if need be, until you can see your lawyer. You are sick, you know that, and any man is sick enough, even when he is perfectly well, to have his affairs in good shape. I certainly will not advise you any differently or any further when I get through. You called me to help you, not to discuss your condition, I imagine.' My reply had the proper effect. He asked his wife to ring up his lawyer, and with a whimsical smile he nodded to me to go ahead, which I did without further delay. And he got well for the time being, which he might not have done, if the shock had been added of telling him my opinion, after that examination."

We are learning more and more about shock and its far-reaching effects on the physical body. 'Tis better by far to prevent shock than it is to treat it after it is caused or produced. Much diplomacy or white lying is sometimes needed in imparting sudden news, either good or bad. You all remember the old school book story beginning with the statement that the magpie is dead and by degrees leading on up to the grand fact in question. Also the story of the Irishman, Casey, when to him was delegated the task of informing his fellow workman, O'Grady's wife, that her

husband had just been killed in an accident. Casey took off his working clothes, put on his better ones and presented himself at the door of the O'Grady home, where he asked very respectfully, if the Widow O'Grady lived there. How much shock his unique method prevented we are unable to say, but I imagine a blunt, direct statement of the facts would have caused quite a good deal more. Frequently we have patients sick almost unto death and the shock of being informed of their true condition would be adding the last straw to the camel's back, and, many times, the anxious ones of the family need to be told very gently or not at all, for life as we see it and live it consists of sentiment and prejudice as much as of cold facts.

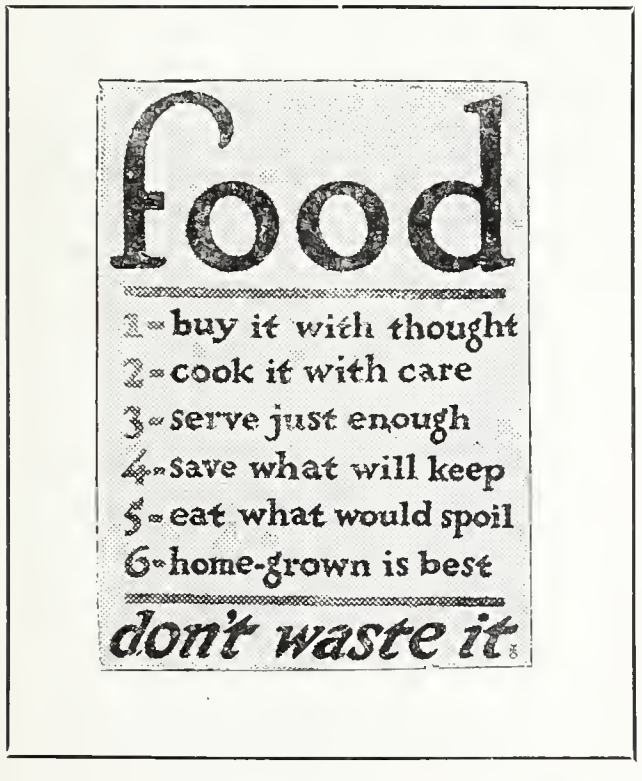
When all the ills of humanity had been released Pandora again heard a small voice crying from the box in which they had been confined, saying "let me out! let me out." The temptation to satisfy her curiosity was too great and again she opened the box and out came Hope, delicate as an early butterfly, which flew here, there and yonder, touching and in a measure healing the wounds caused by the pests of sin, ignorance and vice formerly released by Pandora from the box which confined all human ills. Now, let us disciples of the healing art, in our wisdom, protect this frail-winged soothing messenger and lie as the occasion demands. Hope, sublime, eternal, divine gift of God to man. It sustains the widow's heart, dries the orphans' tears and bids us look to the grave for a fruition of that life beyond. Shall we, because we know, tell the despairing wife, the anxious parent, the trustful children, that the dear one has only a few hours to live? Not me. I once did, but my experience then was sufficient. 'Tis all right to tell some kinsman or friend who has plenty of self-control, but otherwise dodge the issue. Instances and conditions by the score could be brought up, but we will pass on to another phase of the subject. Now, truthfully, who is responsible for the drug fiends we meet everywhere and every day? A few weeks ago I treated a woman for the morphine habit. I asked her how she came to use the drug and she said frankly our family physician caused it. She went on to say that, when she had a spell of sick headache, to which she was subject, he would give her a hypo of morphine to ease her and tell her what he was giving. "After a while my husband and I thought we could get a syringe, some morphine tablets, and save on the costs of my treatment." Well you can guess the rest. The husband then produced his medicine box in which I found aspirin, acetanilid, morphine, strichnine tablets, calomel tablets, etc., galore. He said Dr. So-and-So, who had been their family physician for some time, told them so much what he was giving and why, they thought they could use them themselves and save his costs.

I said to him, "Now, if you have sufficient confidence in me to treat your wife, you must let me proceed in my own way. After spending about six years of my most active life in medical schools and hospitals, I know practically nothing yet regarding the far-reaching effects of medicines. Because of the doctor preceding me telling you what he did, your wife is now in the shape she is. I am treating, not teaching you." He thanked me and said he had never looked at it that way before, but could readily see I was right. You can all call up instances in your work of the harmful results of patients drugging themselves. Once I heard a story related concerning elder Gross on this topic. A couple were stopping in Gross' city. The lady took down with one of her periodic sick spells and Gross was sent for. He came and, after examining her, gave her a dose which soon made her comfortable. She said "Doctor, this medicine you gave me has given me more relief and quicker than anything I ever took before. Tell me what it is so I can keep some of it with me all the time." "Madam," said he, "there are two serious faults in my make-up. Perhaps there may be some virtue in them, but I make no efforts to overcome them. One is plain speaking and the other is a little profanity, and here I will exercise both by saying it's none of your damned business what I have given you."

One other phase and I will close. A mother comes to you with her daughter, who, of course, has taken cold, etc., and everything has suddenly stopped. What can be the matter? You know she has been riding with Johnny Test or strolling with Tommy Long. Shall you tell this mother what you think or perhaps know? A wife who idealizes her husband comes to you with pelvic troubles. You know her husband, a lovable fellow, a decent rounder, etc. You know the germ causing the trouble and how the wife got it. Are you going to tell her the truth? A mother brings her babe to you. It does not grow off

as it should. Has snuffles, notched teeth, etc. She loves her husband and he is her sole means of support. Perhaps he is a zealous Sunday School worker. Are you going to tell her her darling baby has syphilis inherited from the father? Deacon Sandtrs gets off to another city. In a few days after his return home his kidneys begin to act too often, quite a burning sensation on passing his urine. He is anxious for the good wife to know how bad the doctor thinks his piles and kidneys are. The wife and church brethren and sisters are making inquiries about him. Now, are you going to destroy the good works the deacon has done in and for the church and take away the unctiousness of his amen?

One of the families for whom you work has a daughter, beautiful as Venus and pure as Mary. She is arranging to marry Billie Prosperous, whose forefathers were the founders of the town. Her parents are proud of her match and she and Billie love each other dearly. You have treated Billie for his dose or two, and you know the fate in store for his intended. Now, what are you going to do? I thank you.



Go *back* to the *simple* life, be contented with *simple* food, *simple* pleasures, *simple* clothes. Work hard, pray hard, play hard. Work, eat, recreate and sleep. Do it all courageously. *We have a victory to win.*

—Hoover.

Book Reviews.

The Surgical Clinics of Chicago.—Volume I, Number IV (August, 1917), octavo 206 pages, 70 illustrations. W. B. Saunders Company, Philadelphia, 1917. Published bi-monthly. Price, per year, paper, $10.00; cloth, $14.00.

This number furnishes interesting clinic material from fifteen of Chicago's leading surgeons. Dr. Arthur Dean Bevan gives the technic of colostomy. He describes a case with marked stenosis of the entire colon as the result of an inflammatory process of unknown etiology; indications for colostomy; the technic is given in detail, and the after-treatment is fully explained.

Surgical Clinics of Chicago.—Volume I, Number V (October, 1917), octavo of 214 pages, 84 illustrations. W. B. Saunders Company, Philadelphia, 1917. Published bi-monthly. Price, per year, paper, $10.00; cloth, $14.00.

Among the interesting articles in this number we find one on the complications of appendicitis, Clinic of Dr. Daniel N. Eisendrath, Cook County Hospital. He presents a case which illustrates the necessity of keeping in mind the fact that cases of appendicitis which do not present any unusual features at the time of operation may develop most serious complications after operation. For this reason one can never be too guarded when asked as to the prognosis of a case of acute appendicitis.

The Medical Clinics of North America.—Volume I, Number II (The Philadelphia Number, July, 1917), octavo of 269 pages, 28 illustrations. W. B. Saunders Company, Philadelphia. Published bi-monthly. Price, per year, paper, $10.00; cloth, $14.00.

Sixteen prominent clinicians of Philadelphia have contributed to this number. Dr. H. A. Hare, Jefferson Hospital, writes on "Cardiac Diseases and Digitalis." He says: "There is no drug more abused than digitalis, both as to the type of the case to which it is administered and in the doses which are given. To give digitalis to a patient with a failing heart and permit him to go on with his business is like stimulating an exhausted horse at the end of a long drive and then continuing to drive, instead of putting him in a stall and providing him with rest and good food. In mitral regurgitation, with ruptures compensation arising chiefly from cardiac fatigue, digitalis, in proper dose, is of course useful, provided rest is given.

(See additional Book Reviews on page 179.)

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

THE NEXT ANNUAL MEETING.

The annual meeting of the Arkansas Medical Society will be held in Jonesboro, May 7-8-9. By the time this issue of The Journal reaches you the meeting will be only four months off. The depth of winter and the flowers of May seem far apart but the intervening weeks will rapidly pass and it is time right now to be preparing for the scientific program. The Program Committee must soon know what to expect from the members in the way of papers. If you contemplate preparing one you will have little time to spare. The busy physician seldom has the time to spare to sit down and write a paper at one sitting or half a dozen. He has to get his data together and afterwards compile it. All this takes time and usually it must be the time taken when leisure hours come and in the life of a doctor leisure hours are uncertain at best. Therefore if you are going to prepare a paper you should know it now, and knowing it, let the Program Committee know it. Dr. H. A. Stroud of Jonesboro is the chairman. Write him, and give the title of your paper. Or, if you prefer, you may write Dr. C. P. Meriwether, Secretary of the State Society, Little Rock.

There are scores of members with the learning, experience and literary ability to prepare a program of home talent which would vie with those given by any other State Society in the whole country. How best to check epidemics, the treatment of various diseases with concrete examples from your own experience, papers on sanitary problems, unusual operations, the use of certain remedies in diseases in which opinions differ as to the best mode of treatment—these and a score of other suggestions might be made as to subjects of interest. Long papers are not desirable. It is possible to spoil a meeting by reading it to death. The brief paper, which will leave time for exchange of views, is far better. There have been annual meetings in the past in which so many long papers have been on the program that discussions have been eliminated and some papers omitted entirely for sheer lack of time to hear them. That condition is to be avoided this year, if possible, the only handicap being that papers coming in late may be longer than the committee expected. If intending contributors will write and give the name of the paper and its approximate length, 2,000 words or whatever it will make,

the committee can make up the program with some degree of accuracy as to the time to be filled by the reading of papers and the discussion of them. And in urging brevity of papers thought is taken of the importance of discussion. Free interchange of opinion and experience following the reading of a paper is worth more than the mere hearing of an empirical or dogmatic lecture with no chance for discussion. Members attend the meetings for what benefit they derive and one of the greatest benefits is interchange of opinion, thought and experience.

Also, while on this subject, if any member has any suggestions to make which, in his opinion, would make for the success of the meeting, he will confer a favor on the arrangement committee by sending them to the secretary or to The Journal.

THE COMMITTEES FOR 1917-18.

It has been eight months since the last annual meeting of the Arkansas Medical Society and the appointment of committees. It is just possible that some members of committees may have forgotten that they belong on them, and it is practically certain that some members and some chairmen have not actively begun work. That is one essential difficulty with committees with a year's time before them. It sometimes happens that what can be done any time is never done. People travel hundreds or thousands of miles to see Niagara Falls, but there are people living within sound of their roar who have never seen them and never will, because they can go any time. There are millions of Londoners who have never seen the houses of parliament or the Tower or the British Museum, because they can go any time. Many more non-residents of Arkansas have visited Hot Springs than have the State's own citizens. It is an old saying that the tailor's clothes are never mended nor the cobbler's shoes patched. Why? Because they are jobs that can be done any time and therefore are never done. And this applies to long time committees. The committee appointed for a specific purpose to report in a week or a month is much more apt to get together and do their work than is the committee with a year's time to go on. Therefore this reminder of the importance of each committee getting together in ample time and having its report ready to submit to the secretary ahead of the date of the annual meeting. This applies to all committees except the necrological, and even that committee can prepare its report up to the last week or so before the meeting and add to it if the occasion demands.

A list of all committees is published on the first editorial page.

THE CANTONMENT AND THE PUBLIC HEALTH.

If the locating of Camp Pike has been of no other benefit to Little Rock it has been a tremendous advantage to the city on the score of sanitation alone. By reason of the camp's location here the city has had such a series of sanitary measures enforced that it would never otherwise have had, and with the Federal government behind them, through the U. S. Public Health Service. Oiling of stagnant waters, ditches and pools, the filling in of wells containing impure water, the plans to destroy mosquitoes and "swat the fly" and finally the great work of the close inspection of the premises of bakeries, confectioneries, soda fountains and barber shops, followed by the physical examination of all employees of such places, would never have been done—certainly not for a long time, and equally certain, not so thoroughly—had it rested with the State or city.

It is questionable if the civic authorities would have had the authority to make such physical examinations. Primarily this was done for the benefit of the soldiers. Even the Federal authorities could not compel such examinations, but they could and did say, "You cannot sell or serve the soldiers without a certificate. You cannot get a certificate without complying with the rules touching the sanitary conditions of your premises and the examination of your employees." The logical result was that all submitted because if they refused it was a tacit admission to their civilian trade that they were afraid of the test and they would have lost both soldiers and civilian customers. Just how badly such measures were needed is in evidence by the fact that on the first examination not a single restaurant or barber shop was found entitled to even a second class certificate. There were restaurants, catering to high class trade, in the kitchens of which close to where meats were handled, toilets were located and other conditions existed in which, had the patrons seen for themselves, would have driven them away in disgust. Those unsanitary conditions have been corrected. Men and women, too,

affected with venereal diseases were forbidden to work until cured, nor could their places be filled by others without physical examination. The rules for barber shops now assure sterilized razors, combs, brushes, clean towels for each customer and other sanitary precautions, including the elimination of the public bath brush and sponge in bath rooms in barber shops and hotels, and all these safe-guards are enjoyed equally by the civilian and the soldier in whose interest alone such requirements were made possible.

Editorial Clippings.

THE MOUTH AS A PORTAL OF ENTRY.

Not everything that enters by the mouth is desirable for the belly. This free paraphrase of an ancient axiom must not be taken as a flippant reference to such things as chewing tobacco, submarine sundaes, slate pencils, dill pickles and the host of assorted abominations that the human animal so recklessly introduces into himself per orem. This is not a disquisition on foolish foods nor a temperance sermon nor a diatribe against the tobacco habit; it is the sober review of an article by O. T. Osborne, of New Haven, Conn. (Jr. A. M. A. Oct. 20, 1916) on Mouth Infections. Prof. Osborne takes the ground that the bacterial invasion of the teeth and tonsils is the greatest present day menace to health, a stand that is by no means unreasonable when one considers the accumulated evidence of the past three or four years of the importance of mouth infections as the portal of entry for the various members of the coccus family that play such havoc in the human body. One may accept almost without reservation the statement that the pneumococcus, the streptococcus viridans, the streptococcus hemolysans and their more common cousins of the pyogenes group, including the streptococcus pyogenes septicus find their way into the system through the teeth or the tonsils. It is not necessary that the so-called apical abscess should be demonstrated in order to fix the responsibility for infection upon a tooth. Absorption doubtless occurs from the spaces round teeth loosened by pyorrhoea and in many instances can be definitely traced to bridge work as well as to teeth that have been merely filled. The list of diseases traceable to such infections is a formidable one. While one may catalogue such conditions to ulcerative endocarditis focal bacteriemias, nephritis, cholangitis, polyarthritis, thyroid disease, arterioselerosis and a host of subvariants, it is far better to get away from this survival of the Brunonian system and to class all these infectious conditions as focal manifestations of a streptococcosis.

One notes with interest the varying attitude of physicians and dentists toward the treatment of the various problems in which they are called to co-operate. There is an extreme radical class of dentists and of physicians who urge that every suspected tooth be promptly sacrificed; there is an ultra conservative class who still refuse to sacrifice an infected tooth and who rather sneer at the enthusiasm of the radicals, and between the two there is a considerable body of moderates who regretfully sacrifice some teeth by way of compromise so they be permitted to retain others for treatment. The same broad divergence separates the tonsillectomists from the conservatists. Doubtless many harmless tonsils have been rooted out. Doubtless also many should be rooted out that still shrink coyly from the searching professional eye. We recall a beautiful quartrain that was once leveled at a leader among the radical tonsillectomists:

> "The shrinking tonsil from its lair,
> The slimy adenoid,
> He snatches out and leaves instead
> A red hot aching void."

Some day a poet will arise to glorify the dentist who has the courage to remove a diseased tooth rather than to treat it for profit. So much may be said in favor of rational conservatism in the effort to retain teeth that the advocate of wholesome extraction for the relief of mouth infections is likely to be put down as a heedless extremist, but it is better to sacrifice one tooth that has become infected with the streptococcus viridans than to endeavor to check the growth of that destructive parasite once it has begun to grow in the blood stream. One of the saddest of such cases is that of a young wife of a dentist of high repute who died after three months' struggle against a viridans bacteremia. The viridans was demonstrated in a pocket at the root of a molar tooth that her husband had most carefully filled, but too late to save her, although autogenous vaccines were used early and persistently.

The subject is too broad a one to be treated editorially in all its wide-reaching branches,

but the thought may be driven home that after all that has been said and written, there is still but an imperfect conception on the part of doctor, dentist and patient alike of the tremendous importance of a thorough recognition of the part that teeth and tonsils play in the causation of disease and how much can be accomplished by intelligent prophylaxis. —Long Island Medical Journal.

Abstracts.

TRANSFUSION OF UNMODIFIED BLOOD.

Since the publication of his former paper in The Journal A. M. A., of Feb. 13, 1915, in which he described his technic, L. J. Unger, New York, has performed 165 transfusions by this method giving an analysis of it in The Journal A. M. A., Dec. 29, 1917. He reviews the conditions under which it was used and the indications for which it was employed. His summary and conclusions are as follows: 1. The best results of transfusion were obtained in hemorrhage, diseases of the blood, toxemias and shock. In 88 per cent. of the cases of acute hemorrhage, bleeding was stopped by one transfusion. In pernicious anemia, remissions can be initiated. Repeated transfusions, he declares, frequently bring on repeated remissions. Transfusion should be performed before all the effects of the preceding transfusion have been lost. If no remission results, transfusion with a different donor should be repeated. For the hemorrhage of hemophilia, transfusion is practically a specific. It is dangerous to delay too long with palliative measures if active bleeding is present. In purpura, transfusion gives only moderately good results. In the severe cases, it would seem advisable to carry out the suggestion of splenectomy with preliminary transfusions. All attempts to influence acute leukemia failed. In bleeding of the new-born, transfusion is a specific. Especially in cases of melena, temporizing by using other methods is contraindicated. The median basilic vein can be used regardless of the baby's age, and is the route of choice. Transfusion has yielded encouraging results in toxemia, associated with acute infections (pneumonia, typhoid fever), toxemia of pregnancy, scurvy and shock. Transfusion seems to overcome shock if employed at the onset of the symptoms. Since the number of transfusions for these conditions was comparatively small, further attempts must be made in order definitely to settle the questions involved. 2. Transfusion is often of assistance in overcoming intractable suppurative processes and causing a marked increase in the vitality of the patient. In bacteremias, transfusion has had practically no success. It is possible, however, that if immune donors were used the results might be better. Transfusion given preliminary to an operation will often so improve the patient's condition that the surgeon is justified in risking an operation. It will prolong the life of a patient with a debilitating condition. 3. The syringe cannula method (requiring only one syringe) has proved a simple, efficient and dependable one for giving whole unmodified blood. The giving of unmodified blood is the method of choice when blood is required in a tissue (as in various anemias). When it is required to replenish impoverished circulation, citrated blood may serve as a substitute.

Personals and News Items.

Dr. J. W. McDonald has moved from Leola to Little Rock.

Show your patriotism by contributing to the American Red Cross Fund.

Major and Mrs. Wm. A. Snodgrass of Little Rock visited in Hot Springs this month.

Dr. and Mrs. W. F. Smith and family visited in Springfield, Mo., during the holidays.

Dr. W. H. Simmons of Fordyce has moved to Pine Bluff, and is associated with Dr. O. W. Clark.

Physicians visiting in Little Rock during the past month include: R. C. Dorr, Batesville; T. C. Guthrie, Jesup; J. M. Huskey, Lynn; A. M. Hathcock, Harrison.

The Sebastian County Medical Society has decided to pay the annual dues of their members who are in active military service. This is a commendable action, and we hope it will be adopted universally throughout the State.

The Fourteenth Annual Conference of the Council on Medical Education; joint session with the Federation of State Medical Boards; Federation of State Medical Boards of the United States, and the Association of American Medical Colleges will meet February 4-5, Congress Hotel, Chicago.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas physicians recommended for commissions in the Medical Reserve Corps, published in the past four issues, the Surgeon General reports:

Alfred Gillian Hearn, Arkadelphia, 1st Lieut.
Samuel Houston Wood, Camp Pike, 1st Lieut.
Boulanger Gwaltney, Haskell, 1st Lieut.
William Hubert Moreland, Hickory Ridge, 1st Lieut.
George Cleveland Coffey, Hot Springs, 1st Lieut.
Maurice Farvish Lautman, Hot Springs, 1st Lieut.
James Milton Best, Monticello, 1st Lieut.
Louis DeHaven Donaldson, Parma, 1st Lieut.
Richard Calvin Lynch, Success, 1st Lieut.
James Wiley Slaughter, Wesson, 1st Lieut.
Max Overton, Usrey, Blytheville, 1st Lieut.
Newman Burgess Burch, Colt, 1st Lieut.
William Golladay O'Neal (col.), Dumas, 1st Lieut.
Herbert Shirley Watson, Earle, 1st Lieut.
Garfield Boliver Moore (col.), Lookout, 1st Lieut.
Joseph Samuel Davidson, Marvell, 1st Lieut.
Maidello Yates Pope, Monticello, Capt.
John Samuel Wilson, Plantersville, 1st Lieut.
Walter Oling Parrish, Rector, Capt.
Moses Cline Hughey, Rector, 1st Lieut.
Garland Augustus Ellis (col.) Stamps, 1st Lieut.

BEWARE OF SWINDLERS.

No doubt you have seen the several notices, under "General News," in the Journal A. M. A., in several recent issues, entitled "Once More a Warning." These refer to swindlers operating in different sections of the country, —various letters having been received from victims in Ohio, Colorado and other widely separated States. Now comes a letter from the well-known publishing house of W. B. Saunders Co., of Philadelphia, saying a man under the name of E. T. Rogers, claiming to represent the University Progressive Club of Cincinnati, for medical and other journals, has been victimizing physicians in Illinois; and the same subscription swindlers, or another under the name of Robert Wayne, has been relieving physicians of their well-earned cash in the region of Gary, Ind. It is believed there is concerted action, perhaps by an organized band, being taken at this time of the year, to victimize physicians on so-called "subscription" schemes. Every physician should decline to pay any money. by check, or otherwise, to subscription agents not personally known to him, or for whom other physicians cannot vouch. Many of these so-called agents operate under the guise of students "working their way through college."

WAR REVENUE LAWS AND THE DISPENSING OF ALCOHOL BY PHYSICIANS.

Under the War Revenue Act of Oct. 3, 1917, which went into effect Dec. 1, 1917, hospitals, sanatoriums and physicians who use alcohol for nonbeverage purposes are required to file a bond and obtain a permit from the revenue authorities. This law is being administered in connection with the Food Control Act of Aug. 10, 1917, and applies to every one handling alcohol. Heavy penalties are provided for noncompliance with or violation of the law. Physicians should make themselves conversant with the requirements if they have not already complied with the law. Druggists may not sell to physicians, hospitals or sanatoriums nonmedicated alcohol unless the physician, hospital or sanatorium has filed the required bond and obtained a permit. Druggists may, however, sell alcohol to physicians or the general public in any quantity up to one pint provided it is rendered nondrinkable by a prescribed proportion of the following substances: phenol, formaldehyd, mercuric chlorid, hydrochloric acid, tannic acid, alum, lysol or liquor cresolis compositus. A druggist having a permit may fill a physician's prescription or a physician with a permit may dispense prescriptions containing alcohol providing the prescription contains other drugs sufficient to render the alcohol unfit for beverage purposes. To be able to purchase nonbeverage alcohol physicians, hospitals and sanatoriums must, in addition to having filed the bond and obtained the permit, order such alcohol on a form prescribed by the law. The penal sum of the bond must equal $3 for each proof (50 per cent.) gallon of alcohol expected to be on hand or in transit at any one time. The bond must be that of a surety company, or a personal bond signed by two sureties approved by the collector of internal revenue, or may be a personal bond secured by a deposit of liberty or other government bonds. More complete information may be obtained from the district revenue officers. —Journal A. M. A.

NAVY'S CALL FOR BINOCULARS, SPY-GLASSES AND TELESCOPES; "THE EYES OF THE NAVY."

To the Members of the Arkansas Medical Society:

The Navy is still in urgent need of binoculars, spy-glasses and telescopes. The use of the submarine has so changed naval warfare that more "EYES" are needed on every ship, in order that a constant and efficient lookout may be maintained. Sextants and chronometers are also urgently required.

Heretofore, the United States has been obliged to rely almost entirely upon foreign countries for its supply of such articles. These channels of supply are now closed, and as no stock is on hand in this country to meet the present emergency, it has become necessary to appeal to the patriotism of private owners, to furnish "EYES FOR THE NAVY."

Several weeks ago, an appeal was made through the daily press, resulting in the receipt of 3,000 glasses of various kinds, the great majority of which has proven satisfactory for naval use. *This number, however, is wholly insufficient, and the Navy needs many thousands more.*

May I, therefore, ask your co-operation with the Navy, to impress upon your subscribers, either editorially, pictorially or in display, by announcing, in addition to the above general statement, the following salient features in connection with the Navy's call:

All articles should be securely tagged, giving the name and address of the donor, and forwarded by mail or express to the Honorable Franklin D. Roosevelt, Assistant Secretary of the Navy, care of Naval Observatory, Washington, D. C., so that they may be acknowledged by him.

Articles not suitable for naval use will be returned to the sender. Those accepted will be keyed, so that the name and address of the donor will be permanently recorded at the Navy Department, and every effort will be made to return them, with added historic interest at the termination of the war. It is, of course, impossible to guarantee them against damage or loss.

As the Government cannot, under the law, accept services or material without making some payment therefor, one dollar will be paid for each article accepted, which sum will constitute the rental price, or, in the event of loss, the purchase price of such article.

Toward the end of January, it is proposed to distribute throughout the country posters making an appeal to fill this want of the Navy.

As this is a matter which depends entirely for its success upon publicity, I very much hope that you will feel inclined to help the Navy at this time by assisting in any way that lies within your power.

Very sincerely yours,

FRANKLIN D. ROOSEVELT,
Assistant Secretary of the Navy.

REPORTING OF ACCIDENTS FROM LOCAL ANESTHETICS.

To the Editor: The Committee on Therapeutic Research of the Council on Pharmacy and Chemistry of the American Medical Association has undertaken a study of the accidents following the clinical use of local anesthetics, especially those following ordinary therapeutic doses. It is hoped that this study may lead to a better understanding of the cause of such accidents, and consequently to methods of avoiding them, or, at least, of treating them successfully when they occur. It is becoming apparent that several of the local anesthetics, if not all of those in general use, are prone to cause death or symptoms of severe poisoning in a small percentage of those cases in which the dose used has been hitherto considered quite safe.

The infrequent occurrence of these accidents and their production by relatively small doses points to a peculiar hypersensitiveness on the part of those in whom the accidents occur. The data necessary for a study of these accidents are at present wholly insufficient, especially since the symptoms described in most of the cases are quite different from those commonly observed in animals, even after the administration of toxic, but not fatal, doses.

Such accidents are seldom reported in detail in the medical literature, partly because physicians and dentists fear that they may be held to blame should they report them, partly, perhaps, because they have failed to appreciate the importance of the matter from the standpoint of the protection of the public.

It is evident that a broader view should prevail, and that physicians should be informed regarding the conditions under which such accidents occur in order that they may be avoided. It is also evident that the best protection against such unjust accusations,

and the best means of preventing such accidents consist in the publication of careful detailed records when they have occurred, with the attending circumstances. These should be reported in the medical or dental journals when possible; but when, for any reason, this seems undesirable, a confidential report may be filed with Dr. R. A. Hatcher, 414 East Twenty-sixth Street, New York City, who has been appointed by the Committee to collect this information.

If desired, such reports will be considered strictly confidential so far as the name of the patient and that of the medical attendant are concerned, and such information will be used solely as a means of studying the problem of toxicity of this class of agents, unless permission is given to use the name.

All available facts, both public and private, should be included in these reports, but the following data are especially to be desired in those cases in which more detailed reports cannot be made:

The age, sex, and general history of the patient should be given in as great detail as possible. The state of the nervous system appears to be of especial importance. The dosage employed should be stated as accurately as possible; also the concentration of the solution employed, the site of the injection (whether intramuscular, perineural or strictly subcutaneous), and whether applied to the mouth, nose, or other part of the body. The possibility of an injection having been made into a small vein during intramuscular injection or into the gums should be considered. In such cases the action begins almost at once, that is, within a few seconds.

The previous condition of the heart and respiration should be reported if possible; and, of course, the effects of the drug on the heart and respiration, as well as the duration of the symptoms, should be recorded. If antidotes are employed, their nature and dosage should be stated, together with the character and time of appearance of the effects induced by the antidotes. It is important to state whether antidotes were administered orally, or by subcutaneous, intramuscular or intravenous injection, and the concentration in which such antidotes were used.

While such detailed information, together with any other available data, are desirable, it is not to be understood that the inability to supply such data should prevent the publication of reports of poisoning, however meager the data, so long as accuracy is observed.

The committee urges on all anesthetists, surgeons, physicians and dentists the making of such reports as a public duty; it asks that they read this appeal with especial attention of the character of observations desired.

TORALD SOLLMANN, Chairman.
R. A. HATCHER, Special Referee.
Therapeutic Research Committee of the Council on Pharmacy and Chemistry of the American Medical Association.

VACCINATION AGAINST SMALLPOX.

THE KIND OF VACCINE TO USE AND HOW TO USE IT.

The United States Public Health Service advises the following procedure in order to secure the best results from vaccination and to prevent possible complications.

I. THE VACCINE.

The freshest possible vaccine should be obtained. All vaccine packages, pending use, should be kept in a metal box in actual contact with ice.

II. THE VACCINATION.

Vaccination should never be performed by cross scratching or scarification, but by one of the methods described below. If a prompt "take" is very necessary, as in case of direct exposure to smallpox or if the first attempt has been unsuccessful, three or four applications of the virus should be made, but the insertions should be at least an inch apart. Whichever method is used a control area may be first treated similarly, but without the virus, in order to establish the amount of pressure necessary for insertion and in order to demonstrate a possible early immune reaction in previously vaccinated individuals.

PREPARATION.

The skin of the upper arm, in the region of the depression formed by the insertion of the deltoid muscle, should be thoroughly cleansed with soap and water if not seen to be clean, and in any case with alcohol or ether on sterile gauze.

After evaporation of the alcohol or ether, a drop of the virus should be placed upon the cleansed skin. To expel the virus from a capilliary tube, the tube should be pushed through the small rubber bulb which accompanies it,

wiped with alcohol, and one end broken off with sterile gauze; the other end may be broken inside the rubber bulb.. The hole in the latter should be closed with the fingers as the bulb is compressed to expel the virus.

The under surface of the arm is grasped with the vaccinator's left hand so as to stretch the skin where the virus has been placed. The skin is kept thus stretched throughout the process.

Methods.

(a) *The method of incision, or linear abrasion.*—By means of a sterilized needle or other suitable instrument, held in the right hand, a scratch, not deep enough to draw blood, is made through the drop of virus, one-quarter of an inch long and parallel with the humerus. The virus is then gently rubbed in with the side of the needle or other smooth, sterile instrument. Some blood-tinged serum may ooze through the abrasion as the virus is rubbed in, but this should not be sufficient to wash the virus out of the wound.

(b) *The drill method.*—A sterile drill, such as is used for the von Pirquet cutaneous tuberculin test, shaped like a very small screw driver with a moderately sharp end not more than two millimeters wide, is held between the thumb and middle finger, and with a twisting motion and moderately firm pressure, a small circular abrasion, the diameter of the drill, is made through the drop of virus. This should draw no blood.

(c) *The multiple puncture method.*—A sterile needle is held nearly parallel with the skin and the point pressed through the drop of virus so as to make about six oblique pricks or shallow punctures, through the epidermis to the cutis, but not deep enough to draw blood. The punctures should be confined to an area not more than one-eighth of an inch in diameter.

With methods (a) and (b) it is advisable to expose the arm after vaccination to the open air, but not to direct sunlight, for 15 minutes before the clothing is allowed to touch it. With method (c) the virus may be wiped off immediately.

III. The Vaccination Wound.

1. The original vaccination wound should be made as small as possible, and all injury to the vaccinated arm should be guarded against. Any covering which is tight, or more than temporary, tends to macerate the tissues during the "take." This is to be avoided. No shield or other dressing should be applied at the time of vaccination. Customary bathing and daily washing of the skin may be continued, so long as the crust does not break. The application of moisture to the vaccinated area should not be enough to soften the crust.

If an early reaction of immunity is to be watched for, the patient should report on the first, second, fifth and seventh days after vaccination. Otherwise, the patient should report on the ninth day, or sooner if the vesicle, pustule or crust breaks. Every effort should be made to prevent such rupture. However, should the vesicle, pustule, or crust break, and the wound thus become open, daily moist dressings with some active antiseptic, such as mercuric chloride or dilute iodine (one part tincture of iodine in nine parts of water) should be applied. Under no circumstances should any dressing be allowed to remain on a vaccination longer than 24 hours, and no dressing should be applied so long as the natural protection is intact.

On account of possible fouling by perspiration and to lessen the chance of exposure to street dust, primary vaccination should be performed preferably in cool weather.

In order to encourage proper surgical treatment, no charge should be made for the after-care of a vaccination nor for revaccination in case the first attempt should prove unsuccessful.

Although apparently trivial, vaccination is an operation which demands skill in performance and care in aftertreatment in order to avoid the rare, but serious, complications. For the prevention of these complications (a) should be performed with strictly aseptic technique, (b) should cover the smallest possible area for each insertion, and (c) should be treated without any covering which permits maceration.

A child should be vaccinated by the time it reaches the age of 6 months, and the operation should be repeated at about 6 years of age and whentver an epidemic of smallpox is present.—Public Health Reports.

New and Nonofficial Remedies.

Chloramine-T. (Calco): A brand of chloramine-T. Manufactured by the Calco Chemical Co., Bound Brook, N. J.

Salvarsan: A brand of arsphenamine. Supplied in 0.6 Gm. ampules. Manufactured

and sold by Farbwerke-Hoechst Co., New York.

CHLORAMINE-T.: Sodium paratolcuenesulphochloramide. It has the actions, uses, dosage and physical and chemical properties given in New and Nonofficial Remedies, 1917, for chlorazene.

TYRAMINE-ROCHE: A brand of tyramine hydrochloride complying with the standards of New and Nonofficial Remedies. The Hoffman-LaRoche Chemical Works, New York. (Jour. A. M. A., Dec. 1, 1917, p. 1875).

NOVLCAINE: The monophydrochloride of paraaminobenzoyldiethylamino-ethanol. Actions, uses and dosage, see New and Nonofficial Remedies, 1917, p. 31. Manufactured by Farbwerke-Hoechst Co., New York. (Jour. A. M. A., Dec. 22, 1917, p. 2115).

ARSPHENAMINE: The Federal Trade Commission having adopted the name "arsphenamine" as the term to apply to 3-diamino-4-dihydroxy-1-arsenobenzene, first introduced as salvarsan, the Council on Pharmacy and Chemistry voted to adopt this abbreviated name in place of arsenphenolamine hydrochloride now in New and Nonofficial Remedies.

ARSENOBENZOL (Dermatological Research Laboratories): A brand of arsphenamine. It has essentially the same actions, uses and dosage as salvarsan. It is supplied in ampules containing, respectively, 0.4 Gm. and 0.6 Gm. Manufactured and sold by the Dermatological Research Laboratories, Philadelphia Polyclinic, Philadelphia, Pa.

BORCHERDT'S MALT SUGAR: A mixture containing approximately maltose, 87.40 per cent.; dextrin, 4.35 per cent.; protein, 4.40 per cent.; ash, 1.90 per cent., and moisterel, 1.95 per cent. It may be used when maltose is indicated in the feeding of infants, particularly in the treatment of constipation. The Borcherdt Malt Extract Co., Chicago. (Jour. A. M. A., Dec. 1, 1917, p. 1875).

ATOPHAN: A proprietary brand of phenylcinchoninic acid complying with the standards of the U. S. P., but melting between 208 and 212 C. For a description of the actions, uses and dosage, see New and Nonofficial Remedies, under Phenylcinchoninic Acid and Phenylcinchoninic Acid Derivatives. Atophan is sold in the form of pure atophan and as atophan tablets 0.5 Gm. Schering and Glatz, New York. (Jour. A. M. A., Dec. 8, 1917, p. 1971).

Propaganda for Reform.

STRANDGARD'S T. B. MEDICINE: The resident physician of a Canadian sanatorium states that the Dr. Strandgard's Medicine Company of Toronto, Canada, is attempting to sell its "consumption cure" called Strandgard's T. B. Medicine to Canadian soldiers who are being treated at the sanatorium. (Jour. A. M. A., Dec. 15, 1917, p. 2060).

THE CARREL-DAKIN WOUND TREATMENT: From observations of the results of the treatment of wounds by the Carrel method, Wm. H. Welch is convinced that Carrel deserves credit for calling the attention of surgeons to the possibility of the sterilization of infected wounds by chemical means. The Carrel method actually accomplishes sterilization sufficiently for surgical purposes. The destruction of surface bacteria without injury to the body tissues is of primary importance, (Jour. A. M. A., Dec. 8, 1917, p. 1994).

SALVARSAN MANUFACTURE AUTHORIZED IN U. S.: The Federal Trade Commission has granted orders for licenses to three firms to manufacture and sell arsphenamine, the product heretofore known under the trade name of salvarsan, patent rights to which have been held by German subjects. Provided conditions of the license are accepted by the firms, the following will be authorized to make and sell arsphenamine. Dermatological Research Laboratories of Philadelphia; Takamine Laboratory, Inc., of New York, and Herman A. Metz Laboratory of New York. The license stipulates that the name arsphenamine be used in connection with the trade name, that the produce must be submitted to the U. S. Public Health Service for examination before sale, and reserves the right to fix the price. (Jour. A. M. A., Dec. 8, 1917, p. 1989).

SOME MISBRANDED MINERAL WATERS: Shipments of the following bottled mineral waters were seized by the Federal authorities, and on prosecution declared misbranded under the provisions of the U. S. Food and Drugs Act: (1) Baldwin Cayuga Mineral Water; (2) Bowden Lithia Water; (3) Carbonated Colfax Mineral Water; (4) Chippewa Natural Spring Water; (5) Crazy Mineral Water; (6) Crystal Lithium Springs Water; (7) Gray Mineral Water; (8) Henk Waukesha Mineral Spring Water; (9) Seawright Magnesian Lithia Water; (10) White Stone Lithia Water, and (11) Witter Springs Water. The "lithia" waters (Nos. 2, 6, 9 and 10) were in

each case declared misbranded in that they did not contain sufficient lithium to warrant the term "lithia" in the name. A number (Nos. 1, 3, 5, 6 and 11) were declared adulterated in that they contained filthy or decomposed animal or vegetable substances of an excessive number of bacteria. Most of the waters (Nos. 1, 3, 4, 6, 7, 8 and 10) were declared misbranded because the curative claims made for them were found unwarranted, false or fraudulent. (Jour. A. M. A., Dec. 1, 1917, p. 1901).

ANASARCIN AND ANEDEMIN: These are the twin nostrums of cardiac pseudotherapy. Cardiac disease with its resultant renal involvement is frequently encountered; and running, as it does, a chronic course, it offers an almost ideal field of exploitation for the typical nostrum vender, who is more familiar with human credulity than with this preparation. Anedemin is said to consist of apocynum, strophanthus and squill with elder—an irrational mixture of three heart drugs with inert elder. Anasarcin has been stated to contain sourwood, elder and squill. Anasarcin is a dangerous remedy in the hands of the average clinician, and its use is at all times to be condemned. In view of the dangers attending the incautious use of any member of the digitalis group of drugs, it is impossible to condemn sufficiently the recommendation that the use of Anasarcin should be continued without cessation until all symptoms of dropsy have disappeared. In the present state of our knowledge of cardiac drugs, it is indisputable that digitalis and tincture of digitalis are best suited for the treatment of cardiac disease except in those few cases in which intramuscular or intravenous administration must be employed temporarily for immediate effect. (Jour. A. M. A., Dec. 8, 1917, p. 1992).

PEPTO-MANGAN: Physicians having served the purpose of popularizing it, Pepto-Mangan (Gude) is now advertised in newspapers. In consideration of the established facts in regard to the absorption of iron and its utilization, all possible excuse for the therapeutic employment of Pepto-Mangan, in place of iron, has vanished. False claims regarding the efficiency of the preparation have been circulated by its promoters, and about two years ago the Council on Pharmacy and Chemistry reported that while the statements were no longer made, they had never been definitely admitted to be erroneous by the Breitenbach Company, and that Pepto-Mangan was then being exploited to the public indirectly. From a reading of the present advertisement in a medical journal, one can only suppose that this was intended to mislead physicians. The physician who prescribes Pepto-Mangan as a hematinic shows ignorance of the most rudimentary facts of iron therapy, and the intelligent patient soon perceives his limitations. "Useful Drugs" contains a list of iron preparations that are suitable for all conditions that call for iron. William Hunter discusses the subject of anemia and its treatment at considerable length in "Index of Treatment," Edition 6, p. 17-37, and gives many prescriptions containing iron for use under different conditions. (Jour. A. M. A., Dec. 29, 1917, p. 2202).

County Societies.

HEMPSTEAD COUNTY.

The Hempstead County Medical Society met in Hope, December 18, and elected the following officers: J. H. Weaver, president; W. D. Farrow, vice president; M. V. Russell, secretary and treasurer.

DREW COUNTY.

(Reported by Dr. A. S. J. Collins, Sec.)

The Drew County Medical Society at its regular annual meeting elected the following officers for the ensuing year: President, M. B. Corrigan; vice president, M. Y. Pope; secretary-treasurer, A. S. J. Collins; Censor, F. L. Duckworth.

SEBASTIAN COUNTY.

(Reported by Dr. A. E. Hardin, Sec.)

The Sebastian County Medical Society met at the Carnegie Library, Fort Smith, December 18. The following officers were elected: Dr. A. E. Hardin, president; Dr. Clark Wood, vice president; Dr. Everett Moulton, secretary, and Dr. C. S. Bungart, treasurer.

The society decided to pay the dues of about ten members who have joined the Medical Reserve Corps, and continue them as members during the war without assessing dues. The usual annual banquet was omitted.

SEARCY COUNTY.

(Reported by L. D. Robertson, Sec.)

The Searcy County Medical Society met in annual business meeting in the secretary's office at Leslie, January 8. Officers elected for

the ensuing year were: President, Sam G. Daniel, Marshall; vice president, A. S. Melton, Marshall; secretary-treasurer, L. D. Robertson, Leslie (re-elected). Dr. E. W. Wood of Marshall was elected delegate to the next meeting of the State Society. The following is a list of the members: S. G. Daniel, A. S. Melton, I. S. Butler and E. W. Wood, of Marshall; L. D. Robertson and J. O. Cotton, of Leslie; J. A. Henley and W. F. Rodgers, of St. Joe; S. G. Hamm, of Point Peter.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrence County Medical Society met at Walnut Ridge, Wednesday, January 3, 1918. A symposium on oral sepsis and throat trouble by both physicians and dentists had been planned, but the essayists failed to attend. The afternoon was spent on topics relating to the war and other subjects. Dr. E. T. Ponder of Little Rock attended the meeting and enjoyed himself bringing good cheer and renewing old friendships. The newly elected officers were installed at this meeting and the society is again on its feet for the new year. Most of the physicians paid their dues, and, as the time of the year has arrived for this, every one should see to it that this is done without the secretary having to notify them. Every year many physicians get suspended because of their negligence and then want to be re-instated, which causes many errors and lots of unnecessary work. The following were present: W. W. Hatcher, J. C. Land, J. W. Morris, H. R. McCarroll, E. T. Ponder, W. A. Smith, J. C. Swindle, Earle Thomas and G. A. Warren.

WASHINGTON COUNTY.

(Reported by J. W. Walker, Secretary.)

The Washington County Medical Society held its regular meeting in Fayetteville on the first of January, 1918. Dr. E. G. McCormick of Prairie Grove presided. The following members were present: Drs. Wood, Harr, Gregg, Ellis, Bearden, Martin, Henry, McCormick, Miller, Christian, Walker, and Yates. An election of officers for the ensuing year was held and resulted as follows: President, Dr. H. D. Wood, Fayetteville; vice president, Dr. Jno. M. Bearden, Sonora; secretary, Dr. J. W. Walker, Fayetteville; treasurer, Dr. R. T. Henry, Springdale.

In the absence of the regular program, there was a round table discussion of "Gastric and Duodenal Ulcers," led by Dr. H. D. Wood of Fayetteville.

On motion of Dr. E. F. Ellis, a member of the State Board of Health, the name of Dr. Chas. E. Swift, of Elkins, was proposed for honorary membership in this society. The nomination found no opposition and Dr. Swift was elected to honorary membership by acclamation. It was stated by several members, however, and approved by the society, that this action was not taken as a precedent, but wholly on account and in recognition of the high attainments and ethical standing of Dr. Swift. This action of the society marks a departure from the usual routine of electing members and is the only instance since the founding of the society of any physician having been elected to honorary membership.

There being no further business to come before the house the society adjourned.

FRANKLIN COUNTY.

(Reported by Thos. Douglass, Sec.)

The regular annual meeting of the Franklin County Medical Society was held December 4, 1917. Dr. W. C. Porter, the president, presided. There were present Drs. Warren, Gibbons, Harrod, Blackburn, Higgins, Downey, Hyden, Gammill, T. B. Blakely, Wear, Davis, Croeker and Douglass. As a rule when you have one essayist on the program he isn't there, and this happened to us; but we had some quite interesting case reports and discussions. The annual election of officers was held. Dr. J. P. Blakely, of Alix, was elected president; Dr. W. H. Gibbons, of Webb City, vice president, and the same old secretary re-elected—he can't shake the job. Everybody present paid dues. Dr. W. H. Bollinger, Charleston; J. H. Higgins, Altus; L. N. Hyden, Hunt, elected members.

At 7 p. m. we had the best banquet we have ever pulled off, at the Bristow Hotel. As our guest we had the pleasure of entertaining Judge W. A. Falconer, chancellor of this district. There were some good speeches, that by Judge Falconer was especially fluent and cogent. At the close the following resolution was unanimously adopted:

"Whereas, we read in the papers with regret that Judge Falconer has decided not to be a candidate for re-election. We earnestly request that he reconsider his decision. We

feel that his services as chancellor are necessary to the public welfare."

The Judge responded in graceful fashion, and said that the report had been made without his authority; and if the people of the other counties of the district felt about it as did those of Franklin he would seriously consider the matter.

A vote of thanks was extended Mrs. Bristow for the excellent repast served.

PHILLIPS COUNTY.

(Reported by M. Fink, Sec.)

Helena, Jan. 10.—The Phillips County Medical Society met in this city January 8. The out-of-town members present were Dr. E. T. Brown, of Lexa; Drs. W. B. Bruce and H. M. Thompson, of Marvell. Officers elected: President, Dr. W. B. Bruce, Marvell; vice president, Dr. C. H. Trotter; secretary, Dr. M. Fink; censors, Drs. A. E. Cox, W. C. King, of Helena, and E. T. Brown, of Lexa; delegate to the Arkansas Medical Society, Dr. M. Fink.

The application of Dr. Brooks, of Turner, Ark., was honored by being elected to membership by the unanimous vote of the society without referring to the credentials committee. Dr. Brooks enlisted in the Medical Reserve Corps of the army just after making application and he is now in training at Fort Oglethorpe, Georgia. His name will be carried on the roster of members, his dues remitted and his name called at each meeting because of his patriotic act.

The following resolution was passed unanimously:

"Resolved, That the Phillips County Medical Society hereby expresses its hearty approval of the action of those members who have joined the colors and are now serving in the army; and be it further resolved, That those members be given a furlough until their return from service, that their names be called at each meeting of the society and that no dues be collected, and that the secretary request the State Medical Society to also remit all dues to said society."

The Committee on Full-Time Health Officer reported as follows:

"That it has secured a successor to Dr. Vernon Robins, who resigned two months ago in the person of Dr. Charles F. Lynch, of Lansing, Mich., who is now performing the duties of said office.

"Dr. Lynch comes into our midst with splendid endorsements as to his training and accomplishments and as a sanitarian; and with the active, hearty co-operation of this society already pledged, and that of the Citizens' Committee who are financing the office, the wish is father of the thought that public health matters will be promoted to a marked degree and that Helena and Phillips County will be benefited by the election.

"M. Fink, Chairman;
"G. G. Altman,
"J. B. Ellis,
"Committee."

A unanimous vote of thanks was given the retiring secretary, Dr. Aris Cox, for his splendid service before enlisting in the Medical Reserve Corps.

The society celebrates its forty-sixth anniversary, it being organized in 1871, and being the oldest medical society in the State.

The usual banquet was omitted on account of the war.

Book Reviews.

Genito-Urinary Surgery and Venereal Diseases.—By Edward Martin, A. M., M. D., F. A. C. S.; Benjamin A. Thomas, A. M., M. D., F. A. C. S., and Stirling W. Moorehead, M. D., F. A. C. S. 922 pages, illustrated with 422 engravings and 21 colored plates. Tenth edition. Published by J. B. Lippincott Company, Philadelphia. 1917. Price $7.00.

This book gives in a lucid and entertaining manner the generally accepted teachings of the day in regard to the pathology, symptomatology, diagnosis and treatment of syphilis and genito-urinary diseases. It contains a practical presentation of vaccines and serums; tests of renal function; laboratory diagnosis of syphilis and control of treatment; the accepted conservative and radical treatment of prostatic hypertrophy including those measures which have done so much to lower mortality. The authors have endeavored fully to present those therapeutic methods which have received the general approval of the clinical experienced.

Nutritional and Clinical Dietetics.—By Herbert S. Carter, M. D.; Paul E. Howe, Ph. D., and Howard H. Mason, M. D. Published by Lea & Febiger, Philadelphia and New York, 1917. Price, $5.50.

In this very interesting and instructive volume we find the important classes of foodstuff that are required to satisfy the needs of the body. Part III describes the feeding in infancy and childhood. The indications for diet in certain diseases is clearly stated.

DR. ROGER'S *Tycos*, SELF-VERIFYING SPHYGMOMANOMETER

$25.00

We Give Laboratory Service

That Really Helps in Diagnosis

Directions for Procuring Specimens.

Proper Containers.

The Most Precise and Accurate Technic. Interpretation Based upon Wide Experience.

Wassermann Test plus the *Hecht- Gradwohl* Test, the Test that adds 20% to the accuracy of Complement Fixation.

Tuberculosis Complement Fixation Test: A Blood Test of great helpfulness in the early diagnosis of tuberculosis. useful in Arthritis, chronic infections in the uro-genital tract.

Tissue Examinations, *Vaccines, Blood-Chemical* Tests.

We make every Laboratory test of Merit.
Free Containers, free literature. Write us.

Gradwohl Biological Laboratories

928 N. Grand Ave., St. Louis, Mo.

R. B. H. GRADWOHL, M. D. Director

CALCREOSE

A new creosote product accepted by the Council on Pharmacy and Chemistry as a New and Nonofficial Remedy.

CALCREOSE has been found to be valuable in the treatment of bronchitis, especially the bronchitis associated with pulmonary tuberculosis.

Calcreose contains fifty per cent. pure beechwood creosote. As high as 120 grains of Calcreose—60 grains of creosote—have been taken daily without inciting any gastric or other disturbance.

For samples and literature address

THE MALTBIE CHEMICAL CO., Newark, N. J.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. Little Rock, Ark., February, 1918. No. 9

Original Articles.

"PLACENTA PREVIA."*

By L. T. Evans, M. D.,
Mount Pleasant.

I am presenting a paper on this condition because it is one of the great complications in practical obstetrics and is the cause of many deaths. I shall deal with this condition principally by calling your attention to the treatment of placenta previa in domestic practice.

Normally, the implantation of the placenta is wholly within the upper uterine segment. When its site encroaches upon that portion of the uterus which undergoes dilatation in the first stages of labor, the placenta is of necessity partially detached at the onset of labor, or in course of the partial expansion of the lower uterine segment, which takes place during the later weeks of gestation, and hemorrhage follows from torn blood vessels. To this abnormal situation of the placenta is given the name "placenta previa," since the placenta lies partially in advance of the fetus. The condition is classified as central or complete, partial or incomplete, and marginal.

Recent statistics give the frequency of placenta previa as one in one hundred and sixty labors. In my experience it has occurred once in every two hundred labors. It occurs more frequently in the multipara than in the primipara, the proportion being about nine to one, and the greater the parity the greater the chance of placenta previa.

The chief cause of placenta previa consists in an inflammatory condition of the endometrium, the result of former sepsis or abortion.

Treatment—First, the proper place to treat these cases is in a well equipped hospital; but the general practitioner is called to the different homes to treat these cases without being aware of the trouble, because nine times out of ten he is not called to see the patient until there is an alarming hemorrhage. When the hemorrhage is not severe, they pay no attention to it, because it is not accompanied with pain.

I will now give briefly my management of these cases in domestic practice. I always keep in mind the danger of infection; but where there is very little dilatation of the os and severe hemorrhage, I do not hesitate to use a tampon or iodoform gauze in the cervix and vagnia, which helps to control hemorrhage and dilate the os. In those cases where the os is dilated and not entirely covered by the placenta, I rupture the membranes as extensively as possible; then, give tonic doses of strychnine and let the patient deliver herself, or force the presenting part so that artificial delivery may be done.

Where the placenta covers the os, perforate the placenta with one or two fingers and, version done, seize a leg and bring it through the placenta. Do not make too much traction, just enough to bring the presenting part into the pelvic cavity and against the cervix and placenta. Do not try to make forcible and immediate delivery. Stimulate the mother with strychnin and atropin.

No doubt you have already said that my fetal mortality is great, which is true, but the mother's life should be considered first; as placenta previa almost always occurs in the multipara and the loss of a child is much less serious, than the loss of the mother of other children.

It is my rule to adhere as nearly as possible to the method outlined, as I do not get a chance to handle a sufficient number of cases to become familiar with all the methods available.

I will now give you some of the recent conclusions in reviewing the various treatments of placenta previa.

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

1. The ease with whieh the cervix can be dilated in placenta previa indicates that the natural route should be utilized in its treatment. The ease with whieh the cervix may be torn must always be borne in mind in treating these cases.

2. The low maternal mortality when treatment is undertaken at the right time does not justify Cesarean seetion after the beginning of labor, nor of premature delivery.

3. By good obstetrieal training the mortality in three fifths of the cases, due to active interferenee and infection ean be lessened.

4. Complieations of placenta previa may demand Cesarean seetion.

5. In central placenta previa the teehnical skill of the obstetrieian should deeide the question.

6. The prophylactic treatment of an abnormally situated placenta should eonsist in sending the patient at once to a hospital, whieh aetion would lessen both morbidity and mortality.

7. Before viability, both in domestic and hospital practice Braxton-Hicks version is the operation par exeellenee.

8. After viability, provided the child is in good eondition the intraovular use of the elastic rubber bag followed by internal podalic version offers the best results for both mother and ehild. In domestie praetice when the bag is not available, Braxton-Hicks version should again be the treatment.

9. During labor in complete or partial placenta previa with great loss of blood the child being either dead or possessing little ehanee of life, Braxton-Hieks version offers the best results for the mother.

10. Whenever the Braxton-Hieks version is available it should be followed by slow extraetion. All efforts at foreed delivery by dragging the ehild through the undilated cervix will be followed by disastrous consequences to the mother.

11. For the milder varieties of placenta previa, the marginal and the lateral, simply puncturing the membranes is generally the only thing neeessary to eontrol hemorrhage.

12. The cervical and vaginal tampon is a makeshift at best, and should be employed under rigid aseptie conditions.

13. That pituitrin has no place in the treatment of placenta previa.

14. That Cesarean section has a restrieted plaee in the treatment of placenta previa. It should be chosen under the following conditions:

First. With the approaeh of the full term. Seeond. With the placenta covering the greater part or the whole os.

Third. When hemorrhage is profuse, but not enough to make the mother a bad surgieal risk.

Fourth. With the child probably weakened yet offering reasonable prospeets of being saved.

Fifth. When the cervix is in a condition suggestive of prolonged and diffieult dilatation.

Sixth: When there is a negative history of vaginal contamination.

Seventh. When there is assurance of hospital teehnic being used.

DISCUSSION.

Dr. T. F. Kittrell, Texarkana: This is one of the best papers I think I have heard in this Society. I think the doctor's p^per deserves a full discussion, although he has covered the case thoroughly. It is my belief in cases where there is no dilatation, as the doctor says, a Cesarean section is safer, if the facilities are at hand for doing one, both for the mother and the child, than it is with puncture of the placenta. The mortality is only four or five per cent., for both the mother and child, in those cases in good hands and in the hospitals, and I think the mortality is about ten per cent. for the mother and five or six per cent. for the child, in delivery through the placenta by rupture of the placenta. I think in these marginal or lateral cases, with rupture of the membrane, if you bring down a foot, or even sometimes where the head is presented, and you allow the head to jam the placenta, that the hemorrhage may be stopped that way. But, I think in a case where it is learned early enough, and they are at or near a hospital where they can be taken right in, that Cesarean section is safest for both the mother and child.

Dr. Evans: I have nothing more to add.

No one works more for the publie good than does the doctor; the chureh not exeepted.

A poor praetitioner earries a lean pocketbook.

It takes politeness to get patients, and faithfulness to keep them.

Be ehaste in speech and a gentleman always.

—Northumberland Co. (Pa.) Medical Soeiety News.

SQUINT, AND THE IMPORTANCE OF EARLY CORRECTION.*

By R. H. T. Mann, M. D.,
Texarkana.

My only excuse for presenting to you a paper on this subject is this: That medicine is making so many changes, and making those changes so rapidly, that it will be very hard for us to keep up with and progress with the advances which are being made unless we are continually adding to our store of knowledge. One of the French generals, who is now in our country, stated a few days ago that he was afraid to remain away from France longer than two weeks lest he might be out of date.

Squint has been a very much overlooked subject in its treatment, due to the fact that the earlier teachings were wrong in the management and treatment of squint. This was due to two things. One was they did not know the cause; the other was there was no means at that time by which they could make a diagnosis of the refractive error existing in the eye.

When I was a student, we were taught not to interfere with a child who had a squint until they were ten years of age, and not to operate upon them then until they were even older than that. Now we know very differently from that. We know that a child with a squinting eye, and I refer to one class of squint only, and that is hypermetropia—who is left alone until that child is ten years old, has lost the use of the squinting eye. These cases of squint of which I speak are due wholly to eye-strain, to error of refraction. Children are not born with squinting eyes. The squinting usually occurs when they are two or three years old, when they begin to look definitely at objects. And, there is a distinct relationship existing between convergence and eye-strain, or hypermetropia, if you please. Now, when they begin to look distinctly at things, they begin to strain, and the eye crosses. So, consequently, the time to correct that squint is as soon as it is discovered. I want to repeat that the time to begin treatment of squint in a child is just as soon as the squint is discovered, not when the child is ten or fifteen years old, because the retina in the squint eye will not develop unless that eye is used, and your squinting child will go through life with the vision in one eye impaired about one-half, and any operative procedure or any treatment which is left off until the child is ten or fifteen years old will leave this eye not performing its functions through life, unless perhaps the other one should be destroyed. So, consequently, all you can do for the squint eye at that time is to correct it, from a cosmetic view.

Now, I have a number of photographs here which I am going to show you, of just one case illustrative of what I mean. Here is a picture of a child who was brought to me when this baby was nine months old. The child was brought by its mother. I dilated this baby's pupil, and did a retinoscopy on it, and found an error of refraction; I prescribed a pair of glasses for the baby, nine months old. This baby wore these glasses without trying to remove them at all. It has been under my observation for two or three years now, and, with the glasses, the eyes are perfectly straight, the child uses both eyes like any normal child, and does not try to remove the glasses at all. Now, the condition is so much better with the glasses until there is no effort to remove the glasses. So that the idea about a baby or a young child in these cases of squint will not wear glasses is all erroneous, and, if nothing else is done for the child, certainly an examination should be made to see if the trouble cannot be corrected at the very beginning and save the sight of the eye, and it is just as erroneous to leave it for a later time as it is to leave a cleft palate now until the child is ten or fifteen years old.

If I emphasize no other point than this, I wish to say that as soon as squinting is discovered, begin the treatment, because the cause is in the far-sightedness in this class of cases. I wish to thank you very much.

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

NAUSEA IN PREGNANCY.

℞ Tr. cantharidis,
Tr. ferri chloridi .....aa f℥j.
Aquæ .....f℥ij.

M. Sig.: Teaspoonful in water three times a day.—Medical World.

DIAGNOSIS OF SURGICAL AND NEUROTIC BORDERLINE CASES.*

By J. N. White, M. D.,
Texarkana.

By surgical and neurotic borderline we mean those that it is with a great deal of difficulty that we finally decide definitely, if we ever do in some cases, whether it is a surgical case or, whether it is a neurosis. These cases are not confined solely to one sex, but we find a majority of these cases in women, and mostly in married women; and hence, we shall deal largely, if not entirely, with that sex.

This condition is caused mainly by the abuse of procreation and the attendant evils of child bearing; while we have some cases of pure neurosis that are functional, or from heredity, environment, etc.

Meddlesome midwifery in modern times by the medical profession, rapid child bearing and rushed labors all contribute their part to produce these borderline cases on one hand, and up to date society abuse of the sexual act, jealousy, etc., on the other hand.

Too often in our obstetric cases and especially our primipara we try to rush through to get to the opera, catch a train, meet an engagement or get to an operating room to the decided detriment of our patient.

Dr. Joseph B. DeLee in a recent article in the Journal of the American Medical Association had this to say on the results of injury to the cervix in these cases as a producer of invalidism and semi-invalidism: "The lacerated cervix is, in my opinion, more often culpable than a corresponding degree of perineal laceration. The patulous os allows the cervical mucous membrane frictional contact with the septic vagina, the open cervix permits the entrance of bacteria into the uterus. The diseased mucosa is a focus of infection and even low grades of infection cases produce bad after effects." Further on in this article he has this to say: "I feel sure that the accoucheur does not accord the cervix the dignity it deserves. Its mucous membrane is very delicate and easily torn. It is very sensitive to untoward influence, especially infection, and if the latter once obtains a foothold, the eradication of the same is almost impossible."

There is a notion which both the public and profession have entertained for many years, and which is becoming more prevalent among the profession of late, that natural labor should be curtailed as much as possible.

This latter fact is partially explained by the agitation in the lay press for relief from the suffering of child birth, and partly by the general operative furor which has gripped the profession. The old time-tried, time-proved and time-honored, watchful expectancy in the conduct of labor has been replaced by a polyragnasia pernicious in its effects, immediate and remote, and for both mother and child. From these quotations from Dr. DeLee's paper one might think this paper should have been read under the section of obstetrics and gynecology, but, coming from such high authority and coinciding so completely with my experience and observation of twenty years or more in the profession, I think it has a place in a paper on this subject, and besides we meet with a great many neurotic women, cases that we call neurasthenia of different types, hysteria and other neuroses, which doubtless have their origin in some of the causes enumerated, and could be, and have been, cured by operations to correct these apparently trivial defects.

We have the neurasthenia, maybe, sexual type, or the erotomaniac or the hysteriac, or a case we will call subdued jealousy, which ends in hypochondriac melancholia. These different types of neurotic cases tax the general practitioner's knowledge of neurotherapy, as well as arouses extreme sympathy for the poor unfortunate patient; and the only consolation we have when they come to us is that they never stay with any one very long.

When any of the profession makes the mistake to suggest or encourage the suggestion of an operation for any one of these cases, then he gets himself or some other doctor into trouble; for it is these cases that go from one to another of the profession, seeking an operation of one kind or another. I recall a patient who came to me three or four years ago, who had been operated on a few years before, and who was very anxious for a supervaginal-hysterectomy. I advised against it. She came the second time, saying she had rather be dead than feel like she did; but I put her off again.

The newspapers next week gave an account of Mrs. —— death. I learned she died with-

*Read by title before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

out regaining consciousness after leaving the operating room. Another case, Miss Z——, about 30, came to me in the spring of 1915; very nervous; temperature 99; pulse 90 to 100; diarrhea, some nausea and vomiting; anorexia, etc. The tongue and mucous membrane of the mouth were extremely red; and as she had been losing weight, I thought of pellagra. I treated her about two months. The bowel trouble improved; but the other symptoms remained about the same. She passed into the hands of another, and I did not see her for four months; when one day she and her mother came into my office and they asked me to examine her, saying there was a growth in her bowels. I found quite an enlargement in region of the uterus with an ovarian cyst with a history of metrorrhagia of late. An operation was suggested and they very readily consented. She was ordered to the hospital and in a few days we operated, removing the cyst intact, the size of a pint measure, and the uterus with the body full of fibromata from the size of a small marble to that of a hen's egg. We also removed a diseased appendix. She made a rapid recovery and has entirely regained her health, and weighs twenty pounds more than when operated on.

Another very interesting case was brought me in May, 1916, from the Caddo Oil Fields. She was one of those extreme cases of erotomania and her mind was such she had to be looked after and controlled. She had about two weeks before escaped from a hospital in an adjoining State, after three weeks' treatment, preparatory for an operation for pyosalpinx.

At this time (I mean in May) there was some enlargement and considerable tenderness in the region of the left ovary. As she was improving in every way except her mind, I advised against an immediate operation. About two months later she was brought back for an operation, hoping she would be benefited, especially mentally. The erotomania symptoms were worse, as she acted very disgraceful at times. We ordered her to the hospital preparatory for an operation; but, greatly to our surprise, she dressed and quietly left the hospital and caught a train home after learning that we were to operate next morning. A few months later, we learned she miscarried at about five or six months.

We have learned recently from her sister, that her health is much better and her mind is almost normal. It may be very fortunate that my patient succeeded in making her escape, for an operation at that time might have proved rather embarrassing to me, and unprofitable to her.

In reading this paper we hope to call the attention of the profession to the following points:

First. We should be very careful not to operate if there is much doubt as to the beneficial results to the patient; and especially where the operation may prove detrimental to the profession.

Second. We should never be careless in making our diagnosis, neither should we be too dogmatic. We understand that some of the most reputable surgeons in the U. S. A. say in their diagnosis: "It may be gallstones, cancer of the stomach or appendicitis."

Third. We should never be too positive about our patients dying if they fail to have such and such an operation. We know people, and doubtless all of you do, who were told twenty years ago that if they were not operated on they would not live six months. They are still living.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and publisbed under tbe direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under tbe act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deatbs, removals from the state, changes of location, etc., are requested.

Editorials.

THE NEEDS OF THE MEDICAL SERVICE.

Under the above eaption, Lieut. Col. R. E. Noble, M. C., U. S. A., presented before the last meeting of the Southern Medical Association, a most admirable paper, whieh convineingly answers the many questions asked of the department, and whieh have eaused perplexing hours of thought with many doctors.

The eommunication appears in full in the December issue of the Southern Medieal Journal and should be read by every doetor in this country.

In a previous paper by the same writer, presented prior to the time that the United States entered the world struggle, as in the above referred to eommunication, Col. Noble said: "On the medieal profession rests a heavy responsibility, for with the medical profession rests the subject of medieal preparedness."

This is a particularly impressive paragraph and pregnant with truth, and its meaning should sink deep into the heart of every doetor in Ameriea. What was a faet before we entered the struggle is more than a faet now, sinee we have joined forces with our allies in a world war, and which will only be terminated by the suceess of our arms.

We have not a suffieient number of medieal offieers to care for the eombatant and other forees now in training. With the new draft soon to be ealled and the possibility of the raising of an army of between five and ten million, as has been authoritatively foreshadowed, we would repeat, "On the medieal profession rests a heavy responsibility, for with the medieal profession rests the subject of medieal preparedness."

The responsibility of the medieal profession of the United States and its importanee in the suecessful outeome of the war cannot be too forcibly impressed upon every doetor who is mentally and physieally fit and within the age limit, and they are urged to offer their serviees now.

That the surgeon general should have an immense eorps of Medical Reserve Offieers upon whieh to draw, enabling him to place the individual where he will be best fitted for the serviee, is manifestly apparent. This will mean efficiency and by efficiency alone can the responsibility now resting upon the medi-

cal profession of this country be lessened.

On request, the editor of this Journal will furnish application blanks and further information relating to appointment in the Medical Reserve Corps.

MOBILIZING THE PROFESSION FOR WAR.

Until the entire medical profession of the United States, or at least those who are mentally and physically fit and within the age limit, are mobilized within the Medical Reserve Corps of the United States Army, not until then can we give to the Surgeon General that efficiency which he so badly needs in having a large body of medical officers upon whom to draw.

You may never be called, at the same time your joining the Medical Reserve Corps and placing your services at the command of your country, clearly indicates the patriotism which the medical profession, as a whole, should evince and which we must manifest if we are to win the war.

Every doctor must realize that success depends upon a carefully selected and thoroughly trained body of medical officers. By careful selection, we mean the placing of a medical officer in a position where he is best fitted for the service, and only by having an immense corps or the entire profession mobilized upon a war basis, can we serve our country to the best possible advantage.

This mobilization of the entire profession should come from within the body itself, but every physician coming within the requirements of the service, as to age and physical fitness, should seriously consider this suggestion and not wait for complete mobilization, but apply at once for a commission in the Medical Reserve Corps of the United States Army.

It is not only for the combatant forces that medical officers are required, but for sanitation, hospital camps, cantonments and in other departments where the health and life of the forces are dependent upon the medical officer.

We have within the profession a sufficient number of doctors to fully meet the requirements of the Surgeon General's Office, whatever they might be, but to be of service, you must join the Medical Reserve Corps to enable you to meet the appeal which is now being made for a large and efficient Medical Reserve Corps upon which the Surgeon General may draw as requirements demand.

Editorial Clippings.

MEASLES AND GERMAN MEASLES IN THE ARMY CAMPS.

While much is said regarding measles (morbilli) in the Army camps, it seems to be less generally realized that German measles (rubeola) also is prevalent. Rubeola is practically never fatal and complications are rare, whereas measles is often accompanied by most serious complications (bronchopneumonia, otitis media), besides leaving the subject, if he recovers, strongly predisposed to tuberculosis. Many who have suffered from measles in the Army camps also have suffered from bronchopneumonia due either to streptococci or to pneumococci. A number have died, and for those who have recovered from the complicating pneumonia, convalescence has been in many instances delayed by an empyemic sequel. The differentiation of morbilli from rubeola, though difficult in single instances, is in the majority of cases a relatively easy matter to the closely observant physician. In measles, the prodromal stage with its catarrhal symptoms (coryza, photophobia, conjunctivitis and cough) is, in itself, fairly characteristic; and when the disease is epidemic, such catarrhal symptoms should at once excite suspicion. The preceding incubatory leukopenia with relative lymphocytosis and eosinopenia is of some diagnostic importance. Above all, the pathognomonic "Koplik's spots," small, slightly elevated, white or bluish white, sharply circumscribed white spots, the size of the head of a pin or smaller, surrounded by a narrow hyperemic zone, should be sought for on buccal mucous membrane—opposite the molar teeth, inside the lips, or at the junction of the gums with the cheeks. They are present in six out of every seven cases of morbilli, and are visible in the prodromal stage. Again, the maculopapular eruption of morbilli, once it has appeared, is very characteristic. It comes first on the face and scalp, often in front of and behind the ears, and extends to the neck, upper trunk and arms, and, later, to the lower trunk, buttocks and thighs, requiring from two to two and a half days after its first appearance for its full development. At first it is pink, but soon it turns darker red and often brownish

red. As von Pirquet has shown, the times of appearance of the rash on the different parts of the body stand in definite relation to the cutaneous arterial supply; the rash appears earliest on parts of the skin in which the arteral distance from the heart is least and the circulation liveliest. The crescentic grouping of the maculopapular eruption is often striking. In rubeola, or German measles, the prodromes are mild or absent, Koplik's spots are not present, the rash is macular rather than papular, it is of a lighter rose red, and its macules are rarely confluent. Beginning on the face or scalp, it extends (in crops) over the rest of the body in about twenty-four hours. In a few instances, the rash resembles that of measles; more often it could be confused with that of scarlet fever.—Jour. A. M. A., Feb. 2, 1918.

THE VASO-MOTOR SYMPTOMS OF THE MENOPAUSE.

In spite of the great advances of modern physiology and, especially, of the assistance given our understanding, of the physiological disturbances connected with cessation of ovarian and testicular secretion by recent laboratory studies, there is much as yet unexplained in the symptomatology of the menopause. This is a matter of importance to every medical practitioner as the disorders and discomforts of this period have a striking nervous as well as physical effect. Particularly are the vasomotor symptoms hard to control and vexatious to the patient.

Culbertson has recently made a study of this subject, (Surgery, Gyn., and Obstet., Dec., 1916, p. 667), and his findings throw light on the causation especially of the vasomotor disturbances and on a rationale of effective treatment. He explains the somatic and psychical disorders as the result of perverted function of the endocrine glands due to lack of ovarian secretion. The psychic features are especially due to the disturbed thyroid function, usually bordering on hyperthyroidism but less commonly being the reverse.

This writer considers the vaso-motor sypmtoms to be due to an instability of the blood pressure, which usually appears as a "vacillating hyper-tension, both systolic and diastolic." He finds that the diastolic pressure is less increased than the systolic and thus results in a larger pulse pressure, which is the immediate cause of the symptoms, associated with the vacillating arterial pressure. In the fewer cases where there is a hypo-tension, there is still an increased pulse pressure and a similar vacillation of pressure. The hypertension seems referable to excessive suprarenal or hypophyseal secretion. The blood pressure can be gradually brought to normal by the exhibition of the hormone contained in corpus luteum extract from animals in early gestation, and with this the vaso-motor symptoms disappear. Culbertson supports the view that the pressure changes are functional only, by the fact that the appropriate treatment with organ extract produces a return to normal and that there is a definite disproportion between the rise in systolic and diastolic pressure. He advises the control of the treatment by frequent, preferably daily, pressure readings.—California State Journal of Medicine.

Abstracts.

HEMORRHOIDS.

H. J. Spencer, New York (Journal A. M. A., Jan. 26, 1918), calls attention to the danger of the injection treatment of hemorrhoids. The rectal mucosa cannot be freed from pathogenic organisms which may be carried deeper by the hypodermic needle. If an anesthetic is used, defective reflexes are abolished and the mechanical spread of the infection is unretarded. Walking, jolting in cars, etc., helps spread the infection and outpatients are subjected to double perils. He reports a case in which hemorrhoids were injected with quinin and urea hydrochlorid, and which ended fatally, the necropsy showing infection by the gas bacillus. There was local necrosis and parenchymatous degeneration of the lungs, heart, liver, kidneys, etc. Emulsion from one of the pus pockets was injected into a rabbit which later died. The same organism found in the rectal mucosa of the patient appeared in a blood culture from the rabbit's heart.

ABSORPTION OF MERCURY.

J. F. Schamberg, J. A. Kolmer, G. W. Raiziss and J. L. Gavron, Philadelphia (Journal A. M. A., Jan. 19, 1918), have experimentally investigated the absorption of mercury when rubbed into the skin in the form of inunction. Rabbits were used, and the detailed results are given. Their conclusions are as

follows: "1. Animal experiments demonstrate that the chief avenue of absorption of mercury, when applied by inunction, is the skin. 2. Rabbits may be fatally poisoned with mercury by inunction, even when no opportunity of absorption through the lungs exists. 3. Rabbits breathing a mercury-laden atmosphere may absorb considerable quantities of mercury through the lungs, but, as a result of our experiments, we believe the respiratory absorption to be far less important than the cutaneous absorption. 4. Metallic mercury in the form of the official ointment is more volatile and is much more apt to be absorbed by the lungs than calomel ointments of equal strength. 5. Calomel ointments are fully as well absorbed through the skin as the ordinary blue ointment; indeed, we have the impression that calomel is absorbed with greater facility. 6. There appears to be no reason why calomel should not supplant the unclean blue ointment rubbings which have been so long in use."

ITALIAN MEDICAL SERVICE.

V. G. Heiser, New York (Journal A. M. A., Jan. 5, 1918), describes the medical service in Italy during the war as highly efficient and declares that the results have not received the attention they deserve in outside countries. It was characteristic, he says, of the Italian medical service to achieve results and then talk about it. He never heard the medical men speak of what they were going to do. The Italian army consists of about 4,000,000 men and the number of hospital beds is approximately 1,000,000. These facts can be best appreciated by comparing them with the United States, which, with a population almost three times as great as that of Italy, possesses only about 300,000 beds. The organization of the Italian medical service is described in considerable detail. The presiding official of the service has his office with the minister for war as a chief medical officer common to all the armies, who has his headquarters near the front at a point which is the principal center for storage and distribution of supplies. But the service is not so highly centralized as in this country. The care of the wounded at the front, as well as throughout Italy, is undertaken jointly by the Italian Red Cross and the Sanitare Militare or Army Medical Service, medical aid being rendered through the following seven classes of agencies, which may be considered in the order of their relative distance from the front fighting line: (1) the Posti Medicazione or advance dressing stations; (2) the Sezione Sanita, more fully equipped than the preceding; (3) the Ambulancia di Montagna, located from 2 to 5 kilometers behind the front; (4) the Stazione di Sanita, somewhat larger and better equipped than the preceding; (5) the Ospedale di Campo, or field hospitals, somewhat farther back; (6) the Ospedale di Tappa, which are base hospitals, possibly several hundred kilometers behind the lines; (7) the Ospedale di Reservo, institutions or other large buildings located in the cities. The task of handling the wounded is still in a transitional state. For each army there are a large number of quarantine or disinfecting stations. The hospital accommodations afforded by the Italian Red Cross consist largely of converted tourist hotels, schools and other large buildings adapted for the purpose. Rapidly constructed tile buildings or pavilions and cavalry barracks, for which there is little use in this war, are also utilized. Specializing has been carried to a high degree and great progress has been made in the technic used. The ambulance service is described as remarkably efficient. A smooth organization of the hospital trained service is one of the most striking features seen in Italy. One is particularly impressed with the large number of new inventions and the fact that the equipment Italy used to depend on Germany to supply has been largely supplied at home. Laboratory work is done on a gigantic scale. Tuberculosis does not seem to be especially prevalent, though it is said that some thirty thousand tuberculous Italian prisoners have been returned by Austria. Among other activities with which the medical service is associated is an active reclamation service, which reclaims and puts to further use articles taken from the battlefield. The prison camps are also spoken of with high approval. There are special hospitals at the front for venereal diseases, which, according to the statements of Italian officers, have been reduced to almost negligible proportions. Among other novelties is the establishment of a complete medical school near the front line trenches. The writer was much impressed by the excellent care given the wounded in the Italian army and the spirit of service manifested by the medical officers. Quick to meet emergencies, they were on duty early and late, never sparing

themselves, and through it all, a wonderful fellowship and mutual helpfulness prevailed.

Personals and News Items.

Pay your medical society dues now—please.

Dr. R. E. Hays has moved from Fulton to Prescott.

Dr. and Mrs. J. T. Clegg of Siloam Springs visited in Little Rock this month.

If for any reason you failed to pay your society dues before January 1, please see the secretary of your county society immediately.

Dr. W. F. Manglesdorf, Little Rock, has moved his office from 205½ Main street, to the basement of the new State Capitol building.

Dr. Leon Mooney, Mountain Home, was injured February 2, while hunting. The ground was covered with ice and sleet and he slipped and fell, breaking his right arm.

Hospital Unit T, American Red Cross, organized by Major Wm. A. Snodgrass, Little Rock, has gone to Fort McPherson, Ga., for training and equipment for service "over there."

Dr. S. D. Kirkland of Van Buren, Dr. L. E. Love of Dardanelle, Dr. Abner Cook of Hot Springs, Dr. H. J. Hall of Higden, Dr. Chas. S. Holt of Fort Smith, visited in Little Rock this month.

Among a list of appointments of Captains in the Medical Reserve Corps as Majors in the Medical Reserve Corps with rank from December 26, 1917, we find the name of M. D. Ogden, Little Rock.

During January the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies: The Abbott Laboratories: Chlorazene Surgical Powder; Calco Chemical Company: Bethanapthyl Salicylate (Calco); Merck and Company: Acetysalicylic Acid-Merck.

Dr. H. H. Smiley, chief surgeon Cotton Belt general hospital, Texarkana, has resigned to enter the Medical Reserve Corps of the United States Army. Dr. S. A. Collum and Dr. T. F. Kittrell, both of Texarkana, have been appointed acting surgeons to fill the vacancy caused by the resignation of Dr. Smiley.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas physicians recommended for commissions in the Medical Reserve Corps, published in the past five issues, the Surgeon General reports:

Adonis (Don) Smith, Hope, 1st Lieut.

Edward Wesley Pollard, Hughes, 1st Lieut.

Charles Elbert Byler, Lepanto, 1st Lieut.

William Thomas Lowe, Pine Bluff, 1st Lieut.

Samuel Thomas Tapscott, Jr., Searcy, 1st Lieut.

Theron Earle Fuller, Texarkana, 1st Lieut.

CHILD'S WELFARE CAMPAIGN.

The lives of one hundred thousand of the Nation's children are to be saved in a child welfare drive which the Federal Children's Bureau has recently announced. The drive will begin on April 6, one year from the day the United States declared war, and the first day of the Children's Year.

Public health authorities agree that half the deaths of young children are easily preventable. Each State will be assigned a definite quota of the hundred thousand lives to save. State councils of defense and the State women's committees are being called upon to be responsible for the State's quota.

Methods of work will be those which have already proved efficient in saving children's lives in the United States and other warring countries.

To inaugurate the Children's Year a nation-wide weighing and measuring of babies and children of preschool age will be made. No such general test of the well-being of children has ever been attempted. It will show each community what its children need if the men of the rising generation are to be free from the physical defects which the draft has revealed.

The plans contemplate economy for every purpose except for the essential means of protecting child life.

New and Nonofficial Remedies.

TABLETS COAGULEN-CIBA 0.5 GM.—Each compressed tablet contains 0.5 Gm. coagulen-ciba and 0.46 Gm. sodium chloride. A. Klipstein and Co., New York City.

STERILE SOLUTION COAGULEN-CIBA (3 PER CENT.) 1.5 CC. AMPOULES.—Each ampule

contains 1.5 Cc. of a 3 per cent. solution of coagulen-ciba. A Klipstein and Co., New York City.

Sterile Solution Coagulen-Ciba (3 Per Cent.) 20 Cc. Ampoules.—Each ampule contains 20 Cc. of a 3 per cent. solution of coagulen-ciba. A. Klipstein and Co., New York City.

Halazone - Calco—Parasulphonedichloramidobenzoic Acid.—It is said to act like chlorine and to have the advantage of being stable in solid form. In the presence of alkali carbonate, borate and phosphate it is reported that halazone in the proportion of from 1:200,000 to 1:500,000 sterilizes polluted water. Manufactured by the Calco Chemical Co., Boundbrook, N. J.

Chloramine - B (Calco.—Sodium Benzenesulphochloramine.—It contains from 13.0 to 15.0 per cent. available chlorine. The actions, uses and dosage for Chloramine-B (Calco) are claimed to be essentially similar to those given in New and Nonofficial Remedies, 1917, for Chlorazene. This compound was introduced into medicine by Dakin. Its physical and chemical properties are similar to chloramine-T. Manufactured by the Calco Chemical Co., Boundbrook, N. J. (Jour. A. M. A., Jan. 12, 1918, p. 91.)

Dichloramine-T (Calco).—Paratoluenesulphonedichloramide.—This is said to act much like Chloramine-T, but is capable of being used in a solution of eucalyptol and liquid petrolatum, thus securing the gradual and sustained antiseptic action. Like Chloramine-T, Dichloramine-T (Calco) is said to act essentially like the hypochlorites, but to be less irritating to the tissues. Dichloramine-T (Calco) is said to be useful in the prevention and treatment of diseases of the nose and throat. It has been used with success as an application to wounds, dissolved in chlorinated eucalyptol and chlorinated paraffin oil. Manufactured by the Calco Chemical Co., Boundbrook, N. J.

Propaganda for Reform.

Arsphenamine.—No, this is not a new chemical; it is simply the name adopted by the Federal Trade Commission for hydrochloride of 3-diamino-4-dihydroxy-1-arsenobenzene—in other words, salvarsan. The three firms which have been licensed to manufacture this drug are permitted to have their own trade names for it, but the official name "arsphenamine" must be the prominent one on the label of all brands. Hence physicians should at once make it a point to learn and use the name "arsephenamine." (Jour. A. M. A., Jan. 19, 1918, p. 167.)

Dionol.—If physicians take the word of the Dionol Company, the therapeutic possibilities of Dionol are apparently limited only by the blue sky. Even the company admits that "the unprecedented range of action" of this marvel "may come as a surprise." A glance over the published case reports confirms the indifference. Dionol is furnished in two forms, as an ointment and as an emulsion. Dionol itself is a sort of glorified petrolatum, the use of which is said to prevent the leakage of energy from the nerve cells, and by overcoming the short-circuiting always said to be present in inflammation, is asserted to accomplish its wonders. (Jour. A. M. A., Jan. 26, 1918, p. 257.)

Our Archaic Patent Laws.—The reports of the Council on Pharmacy and Chemistry on Secretin-Beveridge and the need for Patent law revision are opportune. At the request of the National Research Council the "Patent Office Society," an association of employees of the U. S. Patent Office, has created a committee to study the U. S. Patent Office and its service to science and to arts. There is no question that one of two things is needed, either a radical change in the patent law itself or the application of more brains in its administration. Now the United States Patent Law is too often used to obtain an unfair monopoly of a medicament or to abet quackery. (Jour. A. M. A., Jan. 12, 1918, p. 95.)

The Carrel-Dakin Wound Treatment.—William H. Welch writes that he was most favorably impressed with the Carrel treatment of wounds, and believes that Carrel should receive credit for calling attention to the possibilities of the sterilization of infected wounds by chemical means. He holds that while undoubtedly the technic of the Carrel treatment is elaborate and requires an intelligence and skill on the part of the surgeon which cannot be counted on for the average surgeon, and that while the preparation of the neutral solution of sodium hypochlorite also requires chemical skill, surgeons should ac-

quaint themselves with the principles and technie, and try to overcome the difficulties of applying the treatment. (Jour. A. M. A., Dec. 8, 1917, p. 1994.)

Venosal.—The Council on Pharmacy and Chemistry reports that Venosal, sold by the Intravenous Products Company, Denver, Col., is inadmissible to New and Nonofficial Remedies because its ehemical eomposition is indefinite; beeause the therapeutic elaims are exaggerated, and because the composition is unscientific. Venosal is a solution of sodium salicylate containing also colchieum and an insignificant amount of iron. Since it is possible to obtain salicylate effects promptly and certainly by oral administration, the inherent dangers of intravenous medication render its routine employment unwarranted. At this time, when economy is a national policy, a further objection to the use of Venosal is the unnecessarily high expense of Venosal itself and the administration. (Jour. A. M. A., Jan. 5, 1918, p. 48.)

Secretin-Beveridge and the U. S. Patent Law.—In 1916, A. J. Carlson and his coworkers demonstrated that commereial secretin preparations contained no secretin, and that secretin administered by mouth or even into the intestines was inert. Yet a U. S. patent was subsequently issued to James Wallace Beveridge, for a process of preparing secretin preparations which would eontain secretin when they reached the consumer, and in a form resisting destruction in its passage through the stomach. At the request of the Council on Pharmaey and Chemistry, A. J. Carlson and his associates studied the stability of the secretin made aecording to the Beveridge patent. The investigation shows that the patent gives no process for the manufacture of commercially stable secretin preparations, nor any means of preventing the destruction of secretin by the gastric juice when administered orally. (Jour. A. M. A., Jan. 12, 1918, p. 115.)

Cactina Pillets.—Aeeording to the manufaeturer of Caetina Pillets (The Sultan Drug Co.), "cactina" is "invaluable in all funetional eardiac disorders such as tachycardia, palpitation, arrhythmia, and whenever the heart's action needs regulating or support." The manufaeturer gives no information as to the mode of aetion of "eactina," but states that it is totally unlike that of digitalis. An examination of the literature indieates that *Cactus grandiflorus* is therapeutieally inert, and no one exeept Mr. Sultan of the Sultan Drug Company claims to have isolated an active principle of it. The Council on Pharmacy and Chemistry examined the literature relating to eaetus and certain proprietary preparations, including Cactina Pillets, alleged to be made from cactus, and reported that the literature does not afford a single pieee of eareful, painstaking work whieh lends support to the claim made for Caetina Pillets. Since then, Hatcher and Bailey examined genuine *Cactus grandiflorus,* and also found that the drug was pharmacologically inert. (Jour. A. M. A., Jan. 19, 1918, p. 185.)

Surgodine.—The A. M. A. Chemical Laboratory having found Surgodine (Sharp and Dohme) to contain 2.51 Gm. free iodin (instead of 2.25 per cent. as elaimed) and 1.78 Gm. eombined iodin (probably ehiefly hydrogen iodid), the Council on Pharmacy and Chemistry reports that it is essentially similar to the official tincture of iodin exeept that it is considerably weaker and, instead of potassium iodid, it presumably eontains hydrogen iodid and probably ethyl iodid to render the iodin water-soluble. Its composition, however, is secret. The Counеil held Surgodine inadmissible to New and Nonofficial Remedies because its composition is secret; because the therapeutic claims made for it are exaggerated and unwarranted, and because it is an unessential modification of the offieial tincture of iodin. Surgodine is a good illustration of the economie waste inseparable from most proprietary medicines. While the free-iodin strength of Surgodine is only about one-third that of the official tincture, its priee is betwetn two and three times as high. (Jour. A. M. A., Jan. 26, 1918, p. 257.)

Need for Patent Law Revision.—The Council on Pharmacy and Chemistry publishes a report prepared by its eommittee on patent law revision, whieh is an appeal for an amendment of the patent law which governs the issuance of patents on medieinal preparations, and more particularly for a revision of the proeedure under whieh such patents are issued. The report points out that to inerease our national efficiency, the government must protect and stimulate sciенee, art and industry, and at the same time eurb waste of the country's resourees; and that, to this end, the patent offiee should encourage discoveries which go to inerease na-

tional efficieney, and refuse patent protection when such protection is not in the interest of national efficieney, conservation of energy and material resources. The report presents a considerable number of specific instances which demonstrate that patent protection has been given where it was not deserved and not in the interest of the public. The report concludes with a reference to the investigation of a patent granted for a preparation of secretin, apparently without any attempt to confirm the highly improbable claims of the patent applicant. (Jour. A. M. A., Jan. 12, 1918, p. 118.)

Hemo-Therapin.—The Council on Pharmacy and Chemisry reports that, according to the Hemo-Therapin Laboratories, New York, Hemo-Therapin is a "combination of highly refined creosols and phenols (which have been detoxicated by special processes) with salts of iron, potassium, sodium, phosphorus and calcium in minute but physiologic proportions—the solution as a whole being designed to approximate closely in various fundamental details the chemistry of the blood." No statement is made, however, as to the quantities of the several ingredients, nor is any information given as to the identity of the "creosols" and "phenols," or as to the nature of the processes whereby these are "detoxicated." The Council explains that the Hemo-Therapin Laboratories ask physicians to believe that the occasional intravenous administration of this liquid will benefit or cure a long list of ailments, including erysipelas, septicemia, pyemia, puerperal infection, malaria, pneumonia, typhoid fever, diabetes, chronic Bright's disease, goiter, arteriorselerosis and locomotor ataxia. The testimonials which are presented for the claims bear a striking likeness to those found in "patent medicine" almanacs. One of the cases is a woman who was bitten by a snake seventeen years ago and who, on the anniversary of the bite, suffers severely from the original bite. (Jour. A. M. A., Jan. 5, 1918, p. 48.)

County Societies.

SEVIER COUNTY.

(Reported by J. C. Graves, Sec.)

Lebanon, Jan. 14, 1918.—The Sevier County Medical Society met in Dr. Archer's office, DeQueen, Jan. 8, for the purpose of electing officers for the ensuing year. Dr. A. J. Clinghan in the chair. Members present: C. A. Archer, C. E. Kitchens, A. P. Owens and J. E. Kennedy of DeQueen; M. L. Norwood and A. J. Clinghan of Lockesburg; F. T. Isbell of Horatio; J. E. Guthrie of Browntown; J. C. Graves of Lebanon. The following officers were elected: President, Dr. M. L. Norwood; vice president, F. T. Isbell; secretary, J. C. Graves; delegate, Dr. C. E. Kitchens; alternate, Dr. C. A. Archer.

BENTON COUNTY.

(Reported by C. A. Rice, Sec.)

Owing to the fearful snow storms and the great amount of bad weather, extreme cold and some other things, the Benton County Medical Society has failed to hold its regular meetings. We should have elected officers the second Tuesday in December, but a heavy snow storm prevented a quorum. Then we called a meeting for election of officers on the second Tuesday in January. Snow and cold again prevented the election. The next day we called another meeting and, for the paying of dues, to be held in Rogers on the 15th day of January, when snow and cold came very near defeating us again, yet we succeeded in getting a quorum, and elected the following officers: President, Dr. L. O. Green of Pea Ridge; vice president, Dr. A. J. Harrison of Lowell; secretary-treasurer, Dr. C. A. Rice of Rogers; delegate to State Convention, Dr. R. S. Rice of Rogers; alternate delegate, J. L. Climmer of Springtown. Dr. C. E. Hurley of Bentonville and Dr. W. A. McHenry of Rogers were elected members of the board of censors. I hope to be able to make my annual report enclosing dues for our entire membership not later than Feb. 1.

Book Reviews.

Impotence and Sterility With Aberations of the Sexual Function and Sexual Implantation.—By C. Frank Lydston, M.D., D.C.L., Chicago. Published by the Riverton Press, Chicago, 1917. Price, $4.00.

In this interesting and instructive book Dr. Lydston presents his hormone theory of aberrations of sex development and function and his researches and observations in the field of sex implantation.

Home Card

UNITED STATES FOOD ADMINISTRATION

WHAT YOU CAN DO TO HELP WIN THIS WAR.

See other side showing why you should do it.

Our problem is to feed our Allies this winter by sending them **as much** food as we can of the most concentrated nutritive value in the least **shipping** space. These foods are wheat, beef, pork, dairy products, and sugar.

Our solution is to eat less of these and more of other foods of which we have an abundance and to waste less of all foods.

Bread and cereals.— Have at least one wheatless meal a day. Use corn, oat, rye, barley, or mixed cereal rolls, muffins, and breads in place of white bread certainly for one meal and, if possible, for two. Eat less cake and pastry.

As to the white bread, if you buy from a baker, order it a day in advance: then he will not bake beyond his needs. Cut the loaf on the table and only as required. Use stale bread for toast and cooking.

Meat.—Use more poultry, rabbits, and especially fish and sea food in place of beef, mutton, and pork. Do not use either beef, mutton, or pork more than once daily, and then serve smaller portions. Use all left-over meat cold or in made dishes. Use soup mo . freely. Use beans; they have nearly the same food value as meat.

Milk.—Use all of the milk, waste no part of it. The children must have whole milk; therefore, use less cream. There is a great waste of food by not using all skim and sour milk Sour milk can be used in cooking and to make cottage cheese. Use buttermilk and cheese freely.

Fats (butter, lard, etc.).—Dairy butter has food values vital to children. Therefore, use it on the table as usual, especially for children. Use as little as possible in cooking. Reduce the use of fried foods to reduce the consumption of lard and other fats. Use vegetable oils, as olive and cottonseed oil. Save daily one-third of an ounce of animal fat. Waste no soap; it contains fat and the glycerine necessary for explosives. You can make scrubbing soap at home, and, in some localities, you car sell your saved fats to the soap maker, who will thus secure our needed glycerine.

Sugar.—Use less candy and sweet drinks. Use less sugar in tea and coffee. Use honey, maple sirup, and dark sirups for hot cakes and waffles without butter or sugar. Do not frost or ice cakes. Do not stint the use of sugar in putting up fruits and jams. They may be used in place of butter.

Vegetables and fruits.—We have a superabundance of vegetables. Double the use of vegetables. They take the place of part of the wheat and meat, and, at the same time, are healthy. Use potatoes abundantly. Store potatoes and roots properly and they will keep. Use fruits generously.

Fuel.—Coal comes from a distance, and our railway facilities are needed for war purposes. Burn fewer fires. If you can get wood, use it.

GENERAL SUGGESTION.

Buy less; cook no more than necessary; serve smaller portions.

Use local and seasonable supplies.

Patronize your local producers and lessen the need of transportation.

Preach and practice the "gospel of the clean plate."

We do not ask the American people to starve themselves. Eat plenty, but wisely, and without waste.

Do not limit the plain food of growing children.

Do not eat between meals.

Watch out for the waste in the community.

You can yourself devise other methods of saving to the ends we wish to accomplish. Under various circumstances and with varying conditions you can vary the methods of economizing.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., MARCH, 1918 No. 10

Original Articles.

MOBILIZATION OF THE ENTIRE MEDICAL AND SURGICAL RESOURCES OF THE COUNTRY.

By the Council of National Defense, Washington.

For the purpose of completing the mobilization of the entire medical and surgical resources of the country, the Council of National Defense has authorized and directed the organization of a "Volunteer Medical Service Corps," which is aimed to enlist in the general war-winning program all reputable physicians and surgeons who are not eligible to membership in the Medical Officers' Reserve Corps.

It has been recognized always that the medical profession is made up of men whose patriotism is unquestioned and who are eager to serve their country in every way. Slight physical infirmities or the fact that one is beyond the age limit, fifty-five years, or the fact that one is needed for essential public or institutional service, while precluding active work in camp or field or hospital in the war zone, should not prevent these patriotic physicians from close relation with governmental needs at this time.

It was in Philadelphia that the idea of such an organization was first put forward, Dr. William Duffield Robinson having initiated the movement resulting in the formation last summer of the Senior Military Medical Association, with Dr. W. W. Keen as president—a society which now has 271 members.

Through the Committee on States Activities of the General Medical Board the matter of forming a nation-wide organization was taken up last October in Chicago at a meeting attended by delegates from forty-six States and the District of Columbia. This committee, of which Dr. Edward Martin and Dr. John B. McLean, both Philadelphians, are respectively chairman and secretary, unanimously endorsed the project. A smaller committee, with Dr. Edward P. Davis, of Philadelphia as chairman, was appointed to draft conditions of membership. The General Medical Board unanimously endorsed the Committee's report; the Executive Committee, including Surgeons General Grogas of the Army, Braisted of the Navy, and Blue of the Public Health Service, heartily approved and passed it to the Council of National Defense for final action, and the machinery of the new body has been started by the sending of a letter to the State and County Committees urging interest and the enrollment of eligible physicians.

It is intended that this new Corps shall be an instrument able directly to meet such civil and military needs as are not already provided for. The General Medical Board holds it as axiomatic that the health of the people at home must be maintained as efficiently as in times of peace. The medical service in hospitals, medical colleges and laboratories must be up to standard; the demands incident to examination of drafted soldiers, including the reclamation of men rejected because of comparatively slight physical defects; the need of conserving the health of the families and dependents of enlisted men and the preservation of sanitary conditions—all these needs must be fully met in time of war as in time of peace. They must be met in spite of the great and unusual depletion of medical talent due to the demands of field and hospital service.

In fact, and in view of the prospective losses in men with which every community is confronted, the General Medical Board believes that the needs at home should be even better met now than ever. The carrying of this double burden will fall heavily upon the physicians, but the medical fraternity is confident that it will acquit itself fully in this regard, its members accepting the tremen-

dous responsibility in the highest spirit of patriotism. It will mean, doubtless, that much service must be gratuitous, but the medical men can be relied upon to do their share of giving freely, and it is certain that inability to pay a fee will never deny needy persons the attention required.

It is proposed that the services rendered by the Volunteer Medical Service Corps shall be in response to a request from the Surgeon General of the Army, the Surgeon General of the Navy, the Surgeon General of the Public Health Service, or other duly authorized departments or associations, the general administration of the Corps to be vested in a Central Governing Board, which is to be a committee of the General Medical Board of the Council of National Defense. The State Committee of the Medical Section of the Council of National Defense constitutes the Governing Board in each State.

Conditions of membership are not onerous and are such as any qualified practitioner can readily meet. It is proposed that physicians intending to join shall apply by letter to the Secretary of the Central Governing Board, who will send the applicant a printed form, the filling out of which will permit ready classification according to training and experience. The name and data of applicants will be submitted to an Executive Committee of the State Governing Board, and the final acceptance to membership will be by the national governing body. An appropriate button or badge is to be adopted as official insignia.

The General Medical Board of the Council of National Defense is confident that there will be ready response from the physicians of the country. The Executive Committee of the General Medical Board comprises: Dr. Franklin Martin, Chairman; Dr. F. F. Simpson, Vice-chairman; Dr. William F. Snow, Secretary; Surgeon General Gorgas, U. S. A.; Surgeon General Braisted, U. S. Navy; Surgeon General Rupert Blue, Public Health Service; Dr. Cary T. Grayson, Dr. Charles H. Mayo, Dr. Victor C. Vaughan, Dr. William H. Welch.

If you are interested in "Infant Welfare Work" and are willing to assist such an organization in your own county, write Dr. H. H. Niehuss, Chairman Infant Welfare Committee, Arkansas Medical Society, El Dorado, Arkansas.

THE COLON, A RESERVOIR OF INFECTION.*

By M. G. Thompson, M. D.,
Hot Springs.

Kellogg in his beautiful book on "Hygiene of the Colon" says: The war still wages. There are pro-colon partisans as well as anti-colon enthusiasts. One thing is certain, however, the colon can no longer be ignored. That this organ, or rather the morbid conditions that develop in it, plays a dominant role in the causation of a long list of the gravest and most common disorders, can no longer be denied.

In the treatment of every chronic disease, and most acute maladies, the colon must be reckoned with. That the average colon, in civilized communities, is in a desperately depraved and dangerous condition, can no longer be doubted. The colon must either be removed or reformed.

One of the most convincing arguments to me that the colon is the point of infection is a well known case of Dr. Lane of London, in which he removed the colon of a boy of 12 or 13, for sarcoma of the wrist, using no medication or other operative procedure. The boy was apparently cured.

Gentlemen, you are too familiar with the literature on the subject for me to rehearse other accusations against the colon made by so many of our best surgeons; for you are assured that they record established facts.

All chronic diseases create a disturbance of the mechanism of nutrition, giving us putrid decomposition of all foods, especially meats, which land in the colon to remain there for an indefinite time, making a chemical reaction decidedly favoring the formation of new micro-organisms. These multiply indefinitely until removed by purgation and diet.

We are often astonished at the length of time decomposed food may remain in the colon . Recently an old man under my care with arthritis and dropsical effusion was put on milk only for some days. He then decided to starve for ten days, drinking freely of water only. He passed curds of milk taken ten days before. A colon that would retain decomposed milk for ten days at a tempera-

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

ture of 100° in contact with the mucous membrane absorbing daily some of the toxic matter, would evidently produce the arthritis of this patient.

This also teaches us how difficult it is to ascertain whether or not the colon is actually empty. No one who had treated this man had recognized the abnormal condition of his colon. We have all seen impacted feces that had remained for weeks and produced the death of the patient.

It is our experience, and the history of loaded colons that have made purgation the sheet anchor of treatment from the earliest history of medicine to the present day. Our experience also has taught us that purgation favors constipation, often bringing the patient into danger. This is why we all have tried the recommendations for the reform of the colon. We have seen some degree of success in all treatments of this character, except where we have mechanical obstruction, in which cases we have had to turn to the surgeon for relief.

Laxatives and diet have played a wonderful part. Massage has often put the medical man to shame when the patient turned to the masseur and found the relief the medical man failed to give.

The high colon tube that every nurse carries in her grip has often done great good; but not by entering the colon as was thought, for it has been demonstrated by the X-ray that the tube does not enter the colon, but by persistent pressure of water in the rectum, moves the bowels. We have heard much of liver medicine and mineral waters and mineral oils, but we have seen all medication fail and in the hour of failure, we have seen the anti-colon enthusiast removing or shortening the colon, declaring it useless and dangerous. He gained the applause of the world for a while; but only for a time, for when the patient relapsed, we would cut down to find the small bowel developed approximately to the size of the old colon, and with new and more dangerous micro-organisms which would bring the climax of disaster.

We have recent witnesses in our city, to putting the patient on starvation treatment for forty days, with hypnotic suggestion, with baths of solution of sulphate of magnesia, and the drinking of large amounts of water daily. By this treatment we have witnessed many fatalities, as we believe, from starvation. During the treatment of these patients by starvation, we have seen them daily on the streets with blue lips, pale cheeks and bleared eyes, raving against the medical profession, because it did not laud their starvation and their imaginative hero.

We all believe in an empty colon when micro-organisms threaten the life of the patient, but it is a question how to keep it empty long enough to destroy the micro-organisms and still feed the patient, for if you starve the patient long enough, he will die of starvation; and, even if you stop after a number of days, you have anemia and change in blood cells and possibly acidosis that may prove fatal.

Now, I want to offer some clinical reports of a number of maladies to show my effort to reform the colon. I hope to show you how I was forced by the necessities of each case to accept of this treatment, rather than burden you with long clinical reports of the age of the patient, and the duration of this disease.

Mrs. R., of Arizona, age 40, came with a letter from a surgeon of ability, saying Mrs. R. had casts in her urine, with dropsical effusion and weak heart, that he had put her on milk, and she had not improved.

Mrs. R. said, "Doctor, I fear I will starve, for I have not been able to retain even water on my stomach for twenty-four hours. Can you benefit me?" I said, "Yes;" but deep down in my soul I felt that I had lied. I ordered the nurse to put her to bed and wash out the bowel with warm water and give her an enema of whey twice daily, for I had nothing else to offer. The next day, in connection with these enemas, she was given whey once daily by mouth, and the next day twice, increasing amounts and times as she could tolerate it, until she could tolerate whole milk. Her only medication was a few doses of cream of tartar every day. She made a good recovery. However, she relapsed two years afterwards and on going to a milk hospital in California, again regained her health.

Patient No. 2. A man near the same age, with same clinical history, except that he could with great difficulty retain water, suffering great pain until he could vomit it. He was treated in like manner, for I could think of no other plan of treatment, and he made a good recovery. Soon after his tolerance of the whey by the mouth, he complained of

pain all one night from the whey he had taken the evening before. I inquired whether a change had been made in preparing the whey, and found that after the casein had been removed, the whey had been boiled, preventing digestion. I will digress here to report a case of hysterectomy where the patient had not been able to tolerate a teaspoonful of warm water for four days and nights, but was given the whey and retained it, drinking one pint a day, and making a good recovery.

Case No. 3. A patient who had gastroduodenal ulcer was treated fourteen days by rectum without a drop of water, but with whey alone, before he was given whole milk. He made a good recovery.

Case No. 4. A remarkable case of a woman fifty years old, who had symptoms of appendicitis, which diagnosis was confirmed by several surgeons. She was operated on, but no pathological symptoms were recognized in the appendix. No improvement from the operation was shown, nor was any improvement apparent a year from date of operation. She applied to me for treatment and insisted upon knowing the diagnosis. I explained stasis of colon to her and told her that if she would follow the treatment of whey and milk, she would get well in a few weeks. She was not disappointed in the treatment.

I forgot to state that most of these patients were allowed to take the juice of an orange once or twice daily, but nothing else except the whey, milk and water. The colon was emptied by purgation and enemas and kept empty, the whey being thrown off by the kidneys, perspiration and respiration. When allowed pure milk it filled the colon with curd, containing lactic acid which destroyed the micro-organisms.

I treated several cases with histories of what is called chronic appendicitis (for you all well know that many insist that it is the colon and not the appendix in these cases, as there is supposed to be "no such condition as chronic appendicitis") and they were all promptly relieved by emptying the colon. I have treated ten or fifteen cases with casts and albumen in the urine, and all made good recovery with the exception of two who had cirrhosis of the liver as complications.

While I am a great believer in this treatment, I would not have you think every physician could say, "take whey and milk alone" and succeed, for the complications are many, too numerous in fact to mention in this short paper. One of the worst is blocking the bowels with the curd. Another of equal importance is the patient's tolerance or intolerance, which must be overcome by suggestive force and power of personality.

Other complications are the frequent passing of urine (often of much more in quantity than the milk taken); free perspiration (wetting the sheet once or twice daily); increase of pulse rate, and some others, all of great importance in considering treatment, but subject to care at the hands of the physician. The time of giving the whey; when to discontinue the whey and commence the milk; the environment of the patient; the necessity of having free ventilation; the necessity of putting the patient to bed, letting him see only the nurse; these are matters which each individual case must determine.

Baths and massage are wonderful powers in making success. Also the necessity of pure milk, which must not be given hot or cold. Pasteurized milk is never successful and few can tolerate buttermilk long enough for success.

I have a medical friend who has often prescribed milk, the patient always giving it up in a few days, disgusted with the milk. He says that he cannot succeed because he cannot give them the "Bull" that I give in my instructions to the patient. I answer that it is necessary to have perfect mental control of the patient.

I would like to speak of this treatment in so-called rheumatism, arthritis, skin eruptions and obesity; but the gist of my idea is the importance of an empty and aseptic colon, which it is difficult to maintain for a length of time necessary for success, and at the same time prevent starvation to the extent of so weakening the patient as to seriously impair the vitality necessary to recovery. Hence my use of first whey and then pure milk.

I do not expect these teachings to meet with the instant approval of all of the society, for when a new idea has been advanced, it has always been questioned. It is in keeping with the education of the doctor to hold every innovation in doubt until its worth is proven. My experience leads me to believe that the whey will be a great factor in quiet-

ing the stomach after a surgieal operation, in lieu of the teaspoonful of hot water usually given.

I eonsider myself very fortunate also in finding that the whey which had been boiled gave the patient pain all night. He did not again eomplain, as we took the precaution of never allowing the whey to reaeh the boiling point. Another patient now under observation states that whenever the whey is allowed to get more than tepid it oeeasions distress. We do not only have to eontend with infeetion from the eolon, but from hyper-digestion of the eolon. We all reeall many obesity patients whose eoneeption of life seems to be the filling of the eolon, and whom you regard as a sum total of beef, wine and beer and they are not benefited, exeept by a skim-milk diet, only suffieient being given to prevent hunger and thirst.

DISCUSSION.

Dr. Walt (Little Rock): It is very unfortunate sometimes, when we are too scientific. I had rather have the care of an ordinary man or woman from the plain every day life than the finest of the specialists on earth, in a spasmodic way. You get a local expression and manifestation because their general condition is bad. Some people talk like you can have cancer and still be well.

I have never known a doctor to maintain as good a physical condition in man or woman as some illiterate man has made for the horse. We consider a man well who has plenty of weight and strength and free from aches and pains, yet this is the class of men who drop dead on the street. The condition of the colon is merely an expression and the symptoms described by the essayist are of the class merely expressing underlying conditions. I have very little respect for a man's ability as a physician from the point of high values, who cannot go into a room in the darkest hour of midnight and prescribe intelligently for a clinical patient, without asking a question.

This condition, like every other pathological expression, depends upon the condition of the values that go in to make it. Life being a matter of supply and demand; waste and repair, it is owing to our ability to meet these requirements as to how good or bad result we shall be able to meet to get a corresponding expression. It is what you *do digest* that kills; not what you do not digest.

Dr. H. H. Kirby (Little Rock): The paper is very interesting, bringing out as it does many phases of the physiological activities, as well as the pathology, of the colon.

In dealing first with the whey treatment of this condition, there are three substances contained within the whey which are of benefit. They are the lactic acid bacillus and the two proteins, lach-albumen and lach-globulin, both being soluble proteins. These are both found in mother's milk and are especially adapted for digestion and assimilation. If the milk or whey is boiled these are precipitated, as well as the lactic acid organism being killed, and naturally would make the preparation unfit for use. The whey serves another purpose in these cases, in that it promotes puristalis and thereby tends to prevent a stasis.

To return to the colon, we should first consider how the condition can best be prevented. The colon in early childhood undergoes marked changes, and tendencies inherited or otherwise, if to be overcome, must be taken care of early—from the seventh to the eleventh year of the child's life, because the colon assumes its definite state at this time. Especially does this apply to malpositions, redundancy, either local or general, fination and dilatation, all of which predispose to in intoxication processes.

To understand the colon one must consider the pinatalsis of it, remembering especially that the waves are antipristolic from the splenic flexure to, but not including the cecum, thereby preventing a tendency to a forcing back of food products into the small intestines. From the splenic flexure to pelvic colon the waves are seldom antipristolic and for pelvic colon may or may not be antipristolic. So it is if food products can be made to pass the splenic flexure the prevention of intoxications in the largest percentage of cases can be brought about. However, this does not occur in all because the iliac colon will frequently be the seat of most marked stasis and decompositions. In conclusion, I might state that angulations at the splenic flexure and at the lower part of the iliac colon are accountable for the largest part of the intoxicatoins and troubles displayed in colonic alterations.

Dr. Thompson (closing): I wish to thank the gentlemen for their discussion. I appreciate their comment. I believe we make mistakes in diagnosis somtimes and we are benefited by consulting each other and co-operating. I went to see Dr. Minor a day or two before I left Hot Springs and showed him this paper and he was much interested in my interpretation of the etiology. He has patients every day who come in from every State in the Union and say that the ordinary procedure brings no relief. He met a negro woman in the street a short time before, and she said: "Doctor, what will cure appendicitis?" He answered: "Take a big dose of castor oil every night and you will soon be well." She took the remedy as suggested and that castor oil swept out that colon every morning and that negro was soon well of her trouble.

Iee paeks in epididymitis relieve the pain quiekly.

Following urethrotonomy a perineal drainage tube is not neeessary after the fourth day.

Would you aeeept the ophthalmaseopic opinion of a man who oeeasionally uses an ophthalmoseope? The opinion of the oeeasional systoseopist is just as valuable.

Syphilis is too grave a disease to treat in any but the most seientific and aggressive manner. If you believe in the effieaey of a single dose of salvarsan and a few months' treatment with protoiodide pills, your therapeutie understanding needs a eomplete revision.—The Urologie and Cutaneous Review.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

HIDE NOT YOUR LIGHT UNDER A BUSHEL.

Perhaps it has occurred to many members of the Arkansas Medical Society that quite a number of those who have read papers at preceding annual meetings, have gone into the service and will not be with us this year. We are all of us given, more or less, to follow the lines of least resistance. The chairman of a committee generally has the lion's share of the work. A comparatively few men go to the front and do the preliminary work to assure a successful convention. A few can be depended upon year after year to contribute papers and the rest mentally say: "Oh, there will be plenty without me," and so remain in the background. This does not only apply to the Arkansas Medical Society; it is the same with county societies and with all professional, business and fraternal organizations.

But this year the old reliables will not all be with us. If those who have been in the background do not get into the limelight there is likely to be a dearth of papers instead of an over-plus. Here is the opportunity also the duty, of new talent to let its light shine. The program committee needs more papers. There is plenty of talent in the profession and it will be welcomed. It cannot be expected that the committee will write individual invitations to the members to contribute. Indeed, that would be in the nature of invidious selection and preference which might be resented. The committee wants volunteers and wants them right now. Do not delay.

The May meeting is not far off and if it is to be a success, the committee must have its program arranged in plenty of time. Dr. Thad Cothern of Jonesboro, acting chairman of the Program on Scientific Work, asks that all who will prepare papers write to him at once, or to Dr. C. P. Meriwether, State Secretary, Little Rock.

Many attractive features are being planned for the Jonesboro meeting. Prominent military physicians and surgeons from Camp Pike are expected to attend, and it is hoped that a good showing will be made. We hope the program space, which has many gaps in it, will be rapidly filled. Do not forget that the convention is your convention. Every individual member should feel thus about it

and exert every effort to make the convention a success.

VOLUNTEER MEDICAL SERVICE CORPS.

To complete the mobilization of the entire medical and surgical resources of the whole country the organization of the Volunteer Medical Service Corps has been authorized. This was the one thing needed not only to make available the medical science of the whole country at home as well as at the war front and in the training camps; but it gives a welcome opportunity to thousands of able men, too old for the actual war front service, to do their "bit" and such "bit" is likely to prove very valuable service. There is a vast amount of work to be done at home because of the heavy draft on the medical resources of the country demanded by needs of the armies in Europe and in the training camps at home. In addition to those in active service there are the members of the Medical Reserve Corps with its age limit of 55 years. But in these days the healthy man is 55 years young, not 55 years old, and with health and mentality unimpaired he is better at 60 than he was at 30 in point of experience and knowledge of his profession, even though debarred by the regulations from active service. Many of these men are not only willing but anxious to do what they can for their country in its hour of need. As an illustration we may mention the case of Dr. S. U. King, of Little Rock, who although past the 55-year age limit, was so determined to serve in some capacity that he persevered until he was finally assigned to service as a tuberculosis specialist at one of the camps.

But there is an abundance of work to be done at home in meeting such military and civil needs not otherwise provided for the purpose of maintaining the health efficiency of the population generally. They can be assigned to hospitals, medical colleges and laboratory work to replace those younger men in active service so as to keep these branches up to standard, the importance of which must not be overlooked. The conserving of the health of dependent families of drafted men and assistance in State, municipal and county sanitary work are other lines of work in which volunteers for this new service are eminently fitted and which they can do as thoroughly as can younger men with the added value of longer experience which they can bring to it. The General Medical Board of the Council of National Defense believes that this home work should be kept to a higher standard of efficiency than even in peace times and with the number of able physicians withdrawn for war service, such an organization as this new Corps is really essential.

Those wishing to volunteer should write to application blanks to the Secretary of the Central Governing Board, Dr. William F. Snow, Washington, D. C. The plan has the cordial endorsement of Surgeon General Gorgas and the entire General Medical Board.

Abstracts.

PRIMITIVE SURGERY.

Primitive surgery in the western hemisphere is the subject chosen by Leonard Freeman, Denver (Journal A. M. A., Feb. 16, 1918), for his presidential address before the Western Surgical Association at Omaha, December 14. He points out that the treatment of disease among the earlier inhabitants of this continent was not so much humbug in all respects as we are likely to think. He declares that their ideas of disease were just as near to the recognition of bacteria as was possible without knowing anything about them, and the medicine-man, while dealing extensively in the occult, had a firm belief in himself and his methods. The surgical treatment covered a large range, from trepaning to amputations, and even a knowledge of certain methods of anesthesia was undoubtedly possessed by some of the primitive people. Also, the strong hypnotic influence exercised by the medicine-man must have had its effect on his patients. The article is readable and is well illustrated.

TYPES OF PNEUMOCOCCI INFECTION.

W. T. Vaughan, Ann Arbor, Mich. (Journal A. M. A., Feb. 16, 1918), describes in detail the Avery method for determining the type of pneumococci germs, as used in the United States Army. The tubes need not be absolutely sterile, though that is desirable, but it is not any special additional trouble to insure sterility of the tubes, when using dry heat for the purpose of sterilizing a part of the pipets. Certain points require special emphasis. First and foremost, the sputum used must come from the chest and must not

be contaminated with saliva. It must be emphasized also, that a report for Type IV pneumococci infection is a negative report. In regard to the dilution of serums used, it must first be said that Types I, II and III may be used undiluted. This is especially true in Type I serum. Dilution should be made in sterile physiologic sodium chlorid solution, and should be kept cold. If the infection should be with the streptococci, instead of the pneumococci, it will be found in the smear from the six-hour culture with uncontaminated sputum. If possible, the determination of pneumococci type by this rapid method should be controlled by agglutination reactions on pure cultures of the organisms. A blood culture should be made in every pneumonia case, soon after the patient's entrance into the hospital, and if pneumococci growth is obtained, an agglutination test should also be made. If time permits, further identification tests should be made on the pure culture.

THE LYMPHATIC SYSTEM AND TUBERCULOSIS.

The *American Review of Tuberculosis* for February discusses in its editorial the relationship of the lymphatic system to infection and to hypersensitiveness or relative immunity to tuberculosis. Because of its anatomical relationship the lymphatic system, draining every part of the digestive and respiratory tracts from which practically every tuberculous infection arises, is in itself almost invariably infected either in its vessels or glands. While there is therefore very commonly a disposition of tubercule bacilli in lymph glands there is as yet no good evidence to show that the lymphatic gland or the lymphocyte has a selective or specific antagonistic action on tubercle bacilli. Pigment granules are carried and deposited in the same manner, the difference between the bacilli and granules lying in the fact that the bacilli are alive, able to increase in numbers, and because of their destructive effect upon tissues to be further disseminated through the body. Lack of reactive tubercle formation to bacilli may be found in other tissues besides those of the lymphatic glands. Nor are arrest foci more frequent in the lymphatic glands than in the lungs. Intestines, often literally bathed in tubercle bacilli, but remaining uninfected, liver and spleen which rarely show tubercle might be termed immune with equal justice. The only immunity known in tuberculosis, that is, the relative immunity to infection by the tubercle bacillus, is dependent upon a pre-existent focus of infection with the tubercle bacillus. Only such a focus and none of its component parts alone, or tuberculoprotein alone will produce this condition. From this point of view the work of Webb, briefly recorded in the same number of the *Review,* is of great significance and it is hoped that further refinements in his methods of lymph gland transplantations may shed light upon the baffling problem.—Editorial, A. K. K.: The Lymphatic System and Tuberculosis, *Am. Rev. Tub.*, 1918, i. II.

Personals and News Items.

Dr. E. M. Gray has moved from Evening Shade to Vesta.

Dr. J. B. Watts of Tyro, has moved to Dumas.

Dr. E. E. Holt of St. Louis, has moved to Mena, Arkansas.

Dr. H. B. B'Shears of Fulton, has moved to Little Rock.

Dr. and Mrs. Wm. R. Bathurst of Little Rock, visited in St. Louis this month.

Dr. and Mrs. George E. Tucker of Bigelow, visited in Little Rock this month.

Dr. and Mrs. A. E. Harris of Little Rock, have returned from Baltimore.

Dr. W. E. Womack has moved from Hermitage, Arkansas, to Redwater, Texas.

Dr. H. J. Hall's office at Higden was destroyed by fire February 25.

Dr. and Mrs. George S. Brown and their son of Conway, visited in Little Rock last month.

A movement is being made by the Anti-Tuberculosis Association to build a tuberculosis hospital at Fort Smith.

Dr. S. E. Thompson has purchased the Mountain Park Sanitarium at Kerryville, Texas. This splendid institution will be known as the Thompson Sanitarium.

Circular of information and application blanks for appointment in the Medical Reserve Corps may be had from the editor of this Journal.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas physicians recommended for commissions in the Medical Reserve Corps, published in the last six issues, the Surgeon General reports:

Charles Kennard Townsend, Arkadelphia, 1st Lieut.

Donald Ray Wilson, Fayetteville, 1st Lieut.

Guy Hodges, Garfield, 1st Lieut.

Ossian Homer King, Hot Springs, 1st Lieut.

Allen Coulter Torrence, Hot Springs, 1st Lieut.

Amos Elmer Robinson, Leachville, 1st Lieut.

Arles Arland Blair, Scranton, 1st Lieut.

CHANGE IN THE CONSTITUTION AND BY-LAWS OF THE ARKANSAS MEDICAL SOCIETY.

The committee on constitution and by-laws at the 1917 meeting recommended the following changes to be voted on at the Jonesboro meeting, May, 1918:

1st.—That Section 2, Chapter 4, be amended as follows: After the word "thereof" in the fifth line to read as follows: "provided that its annual report and assessments are in the hands of the secretary 30 days prior to the annual meeting. Each component society, however, regardless of its number of members, which has complied with this section, is entitled to one delegate."

2nd.—Section 3, Chapter 7, be amended as follows: Omit the last ten words of the section.

3rd.—Section 8, Chapter 9, be amended as follows: After the words "into whose jurisdiction he moves" add "and this request must be made within twelve months."

4th.—Section 5, Chapter 9, be amended as follows: Omit the following words beginning in line 6: "who is a graduate of a reputable medical college."

5th.—Section 3, Chapter 6, be amended as follows: The treasurer shall give bond in the sum of $3,000.00.

6th.—Section 4 shall be amended as follows: The secretary shall give bond in the sum of $3,000.00.

7th.—Section 3, Chapter 5, be amended as follows: Change the word "morning" to "afternoon."

NUMBER OF MEDICAL OFFICERS DISCHARGED SINCE WAR BEGAN TOTALS 1,050 FOR ALL CAUSES

Nearly 14,000 in Active Service—Dismissals Continuing at the Rate of Fifty a Week Since War Department's Examination Order Was Issued.

The Committee on Public Information issues the following:

From the declaration of war up to February 23 the Surgeon General of the Army has discharged 1,050 officers of the Medical Reserve Corps other than the 31 removed by death. In the following table the reason assigned for discharge does not isolate under "inaptitude for the service" all those whose dismissal was in considerable degree due to inefficiency or incompetency, since the latter reasons had weight in many cases otherwise classified.

CLASSIFICATION OF DISCHARGES.

The members discharged are classified as follows:

Physical disability	411
Inaptitude for the service	154
To join other branches of service	306
Domestic difficulties	59
Resignation	88
Needed by communities, hospitals, schools, etc.	32
	1,050

During the same period there have been 2,265 promotions of Medical Reserve officers, including some officers promoted more than once.

TOTAL STRENGTH OF THE CORPS.

The discharges are in addition to about 4,000 rejections of applicants previous to their acceptance, 21,740 having been accepted and recommended to The Adjutant General's Office for commissions, and of these 13,687 were on active duty on February 23. The total strength of the Medical Corps on that date is as follows:

Regular Army Medical Corps	768
Medical Reserve Corps	13,687
Medical Corps, National Guard	1,207
Medical Corps, National Army	32
	15,694

At the outbreak of the war there were 877 medical officers, 490 regulars, and 387 reserve officers on active duty.

METHOD OF RECRUITING.

All the physicians and surgeons taken into the Medical Reserve Corps to care for the new armies were chosen by the following plan:

1. All candidates were required to be certified by the American Medical Association as being reputable and in good standing.

2. All candidates were required to be practicing physicians legalized to practice by State laws. They were, therefore, doctors whom any person might have called into his own home when a member of his family was sick.

3. All candidates for the Medical Corps were, prior to their acceptance for service, examined by a board of qualified and especially selected physicians and surgeons. These boards were mostly composed of Medical Reserve Corps officers who, in some cases, placed too high an estimate on the men they passed upon, hence attention has been given to checking up their work and calling before boards for re-examination all whose work does not clearly establish their ability to meet the standards set.

DISCHARGES AT RATE OF FIFTY A WEEK.

During the first six months of the war, 228 Medical Reserve officers were discharged for all causes. On November 1, the Surgeon General sent a letter to commanding officers of medical units, calling attention to the War Department's provision for the examination of reserve officers as to "capacity, qualifications, conduct and efficiency." Since November 1 there have been 822 discharges in less than four months and discharges are continuing at the rate of 50 a week. The rate of discharges was again increased by a letter sent by the Surgeon General on December 14 to department and division surgeons and commanding officers of hospitals outlining action to weed out incompetents by (a) psychological examination for mental capacity; (b) transfer of those unsatisfactory in their present work to other duties, to work involving no care of the sick for those who have been found unsatisfactory in that branch; (c) further instruction for those needing it; and (d) elimination from the service of "men who by reason of physical or mental incapacity, viciousness, or laziness can not be made competent officers."

New and Nonofficial Remedies.

BARBITAL-ABBOTT.—A brand of barbital complying with the New and Nonofficial Remedies standards. The Abbott Laboratories, Chicago.

ACETYLSALICYLIC ACID-MERCK.—A brand of acetylsalicylic acid complying with the New and Nonofficial Remedies standards. Acetylsalicylic acid is employed in rheumatic conditions, and especially as an analgesic and antipyretic in colds, neuralgias, etc.

MERCURY BENZOATE-MERCK.—A brand of mercuric benzoate complying with the New and Nonofficial Remedies standards. Mercuric benzoate has the properties of murcuric chloride. It has been said to be useful for hypodermic use and in gonorrhea. Merck and Company, New York.

BETANAPHTHY SALICYLATE - CALCO. — A brand of betanaphthyl salicylate complying with the new and Nonofficial Remedies standards. Betanaphthyl salicylate is believed to act as an intestinal antiseptic and, being excreted in the urine, to act in a similar way in the bladder. It is said to be useful in intestinal fermentations, catarrh of the bladder, particularly gonorrheal cystitis, rheumatism, etc. The Calco Chemical Co., Bound Brook, N. J.

BARBITAL.—Diethyl-Barbituric Acid, first introduced under the name of veronal. In small doses barbital is a relatively safe hypnotic, but fatalities have followed its indiscriminate use. It is claimed to be useful in simple insomnia, as well as in that accompanying hysteria, neurasthenia and mental disturbances. From 0.3 to 1 Gm. (5 to 15 grains) in hot water, tea or milk, or, if in wafers or capsules, followed by a cupful of some warm liquid.

CHLORCOSANE.—A liquid obtained by chlorinating solid paraffin. It contains about 50 per cent. of chlorin in stable combination. Chlorcosane is used as a solvent for dichloramine-T; with it solutions containing as much as 8 per cent. may be prepared. When

used in a hand atomizer, chloreosane solutions of dichloramine-T may be made less viscous by the addition of 10 per cent. of carbon tetrachloride. The Abbott Laboratories, Chicago.

Chlorazene Surgical Powder.—An impalpable powder composed of chlorazene, 1 per cent.; zinc stearate, 10 per cent., and sodium stearate, 89 per cent. Chlorazene Surgical Powder is absorbent, slightly astringent, and forms a closely adherent film when applied to the skin. It may be dusted freely over denuded or abraded areas, cuts, wounds, and skin eruptions. The Abbott Laboratories, Chicago. (Jour. A. M. A., Feb. 16, 1918, p. 459.)

Propaganda for Reform.

Pyxol.—This is a proprietary preparation somewhat similar to the compound solution of Cresol of the U. S. Pharmacopeia. In 1915 Pyxol was declared misbranded under the Insecticide Act. (Jour. A. M. A., Feb. 23, 1918, p. 559.)

Luminal.—Chemically, luminal is phenylethylabarbituric acid, and differs from veronal only in that one ethyl group is replaced by a phenyl group. Luminal is claimed to be a useful hypnotic in nervous insomnia and conditions of excitement of the nervous system. (Jour. A. M. A., Feb. 23, 1918, p. 559.)

Trousseau's Wine.—This obsolete combination of drugs acting on the heart and kidneys is made by maceration of digitalis, squill and juniper berries in wine and alcohol, and adding potassium acetate to the expressed liquid. (Jour. A. M. A., Feb. 23, 1918, p. 559.)

Acetylsalicylic Acid and Phenyl Salicylate Incompatible with Alkalies.—In the presence of moisture, acetylsalicylic acid is decomposed by magnesium oxide (calcined magnesia), as is also phenyl salicylate (salol). Hence these drugs should not be combined with magnesium oxide in a prescription. (Jour. A. M. A., Feb. 9, 1918, p. 410.)

Antiphlogistine.—A. G. Gould, M. D., Plant Physician to the Goodyear Tire and Rubber Company, writes that after corresponding with the physicians in charge, he finds incorrect the claims of the Denver Chemical Company, regarding the use of Antiphlogistine by certain establishments. He asks: Is there not some way that such exploitation of our large companies can be prevented? (Jour. A. M. A., Feb. 23, 1918, p. 557.)

Basy Bread.—This is an asserted obesity cure put out by the Doctors' Essential Food Company, Orange, N. J. The advertising claims are extravagant and typical of other obesity treatment literature. Analyses indicated that in composition Basy Bread was similar to graham bread. Basy Bread sells for $1 a loaf. Dr. Wiley well sums up the case thus: "There is one way in which Basy Bread will reduce, that is, don't eat any of it nor much of it nor much of any other kind. (Jour. A. M. A., Feb. 9, 1918, p. 407.)

Calcium Iodide in Tuberculosis.—There appears to be no work to indicate that the intravenous administration of calcium iodide in tuberculosis is of value. It has not been demonstrated that tuberculosis is associated with a deficiency of calcium. On the other hand, experiments demonstrate that the administration of calcium does not change the calcium content of the blood. Furthermore, there is no evidence to warrant the intravenous administration of iodides. (Jour. A. M. A., Feb. 16, 1918, p. 481.)

Sodium Bicarbonate.—Few patients will object to the taste of sodium bicarbonate if the required dose is administered dissolved in a convenient quantity of cold water. The taste may be disguised by dissolving the sodium bicarbonate in carbonated water or else by adding a little sugar and lemon juice to ordinary water. Sodium bicarbonate may also be prescribed in the form of tablets. Though it is better that these be allowed to dissolve in the mouth, in most cases they are swallowed without discomfort. (Jour. A. M. A., Feb. 9, 1918, p. 410.)

Bell-Ans (Papayans, Bell).—"Are you going to sit there and let the other folks eat up all the good things just because you are afraid to pitch in, when 2 or 3 Bell-Ans taken before and after the meal would enable you to enjoy your share of all that's coming without a bit of discomfort or distress? Bell-Ans has restored the pleasures of the table to thousands who say: 'I can now eat anything and plenty of it, too'." The New York Tribune comments that such advertisements as this is not limited to the evil effects to the misguided individual who eats lobster and ice cream at

midnight and trusts to Bell-Ans to atone for his indiscretion. The most serious effect of such reckless advice is the example which the advertising sets to other advertisers. (Jour. A. M. A., Feb. 23, 1918, p. 557.)

Syphilodol.—According to the French Medicinal Company, Inc., which markets the product, Spyhilodol "is a synthetic chemical product of silver, arsenic and antimony * * *" Nowhere in the advertising matter is there a more comprehensive statement regarding the composition of this "new synthetic" than that just quoted. The product is being examined in the A. M. A. Chemical Laboratory, the examination having advanced sufficiently to show that Syphilodol contains considerable quantities of mercury. Although the advertising leaflet claims that the preparation is "the formula of the late Dr. Alfred Fournier of Paris" and has been exhaustively tested by Metchnikoff, a careful search of French medical journals fails to show any report on Syphilodol. (Jour. A. M. A., Feb. 23, 1918, p. 559.)

Absorption and Excretion of Mercury.—It may be regarded as clearly established that, in addition to the kidneys, the stomach may participate in this elementary function quite as well as the other portions of the alimentary tract. The occurrence of severe intoxicants from the use of mercuric chloride in vaginal douches is likewise recognized. The absorption of mercury through the sound skin has been in dispute. To account for the efficacy of mercurial inunction, the contention has been made that the mercury thus applied is volatilized and absorbed through the lungs in greater part if not entirely. Experiments in the dermatologic laboratories of the Philadelphia Polyclinic leaves little doubt that the skin is an important, perhaps the most important path of absorption of mercury applied by inunction. (Jour. A. M. A., Feb. 9, 1918, p. 392.)

Phenalgin and Ammonol.—At the time that synthetic chemical drugs were coming into fame and when every manufacturer who launched a new headache mixture claimed to have achieved another triumph in synthetic chemistry, Ammonol and Phenalgin were born and duly christened with chemical formulas. However, one of the first reports of the Council on Pharmacy and Chemistry showed them to be mixtures composed of acetanilid, sodium bicarbonate and ammonium carbonate. Since then the unwarranted claims made for these preparations have been exposed repeatedly, and the danger of the indiscriminate use of headache mixtures pointed out. Despite the exposure of the methods used in exploiting Ammonol and Phenalgin, one finds just as glaringly false statements made in the advertisements of Phenalgin today as were made in its unsavory past. This would seem to indicate either that physicians have short memories or that they are strangely indifferent to the welfare of their patients, to their own reputation, and to the good name of medicine. (Jour. A. M. A., Feb. 2, 1918, p. 337.)

Campho-Phenique.—The Secretary of the Harvard University Medical School received, from the Campho-Phenique Company of St. Louis, a letter stating that the concern wishes to supply the senior students of all Medical Colleges with samples of Campho-Phenique and Campho-Phenique Powder, and ointment, and asking the number of students and the name of every student in the graduating class. The Campho-Phenique concern believes in following the old advice, "Catching them young." In 1907, the Council on Pharmacy and Chemistry reported that Campho-Phenique (liquid) was exploited under a false "formula," that it was a solution of camphor and phenol in liquid petrolatum, and that for all practical purposes Campho-Phenique Powder was essentially a camphorated talcum powder containing apparently sufficient phenol and camphor to give the powder an odor. The report of the Council further brought out that the Campho-Phenique Company was in effect one of the numerous trade names adopted by one James F. Ballard. Mr. Ballard seems to market a number of "patent medicines," for some of which Dr. Ballard has pleaded guilty in the Federal courts to making false and fraudulent claims. (Jour. A. M. A., Feb. 9, 1918, p. 408.)

Fellows' Syrup and Other Preparations of the Hypophosphites.—An advertisement for Fellows' Syrup reads: "Fellows' Syrup differs from other preparations of the hypophosphites. Leading clinicians in all parts of the world have long recognized this important fact. Have you? To insure results, prescribe the genuine ℞ Syr. Hypophos. Comp. Fellows'. Reject cheap and inefficient substitutes. Reject preparations

"just as good." In truth, Fellows' Syrup is not like the better preparations of this type, since after standing it contains a muddy looking deposit that any pharmaceutical tyro would be ashamed of. Examination of the literature used in the exploitation of Fellows' Syrup fails to disclose any evidence to show that it has therapeutic value. Not only is there an entire absence of any evidence of its therapeutic value, but there is an abundance of evidence that the hypophosphites are devoid of any such therapeutic effects as they were formerly reputed to have, and that they are, so far as any effect based on their phosphorus content is concerned, singularly inert. As the result of its investigation of the therapeutic effects of the hypophosphites, the Council on Pharmacy and chemistry concluded: There is no reliable evidence that they exert a physiologic effect; it has not been demonstrated that they influence any pathologic process; they are not "foods." If they are of any use, that use has never been discovered. (Jour. A. M. A., Feb. 16, 1918, p. 478.)

During February the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

The Abbott Laboratories: Chlorcosane, Barbital-Abbott, Procaine-Abbott.

Dermatological Research Laboratories, Philadelphia Polyclinic Arsenabenzol (Dermatological Research Laboratories) 1 Gm. Ampules.

Eli Lilly and Company: Typhoid Vaccine, Prophylactic; Typhoid Vaccine, Therapeutic; Typhoid Mixed Vaccine, Lilly.

Merck and Company: Mercury Benzoate-Merck.

Monsanto Chemical Works: Halazone-Monsanto.

H. K. Mulford Company: Bulgarian Bacillus, Friable Tablets.

Obituary.

DR. JAMES T. HENRY.—Dr. James T. Henry of Bentonville, age seventy, died March 2. He leaves a widow, five daughters and one son. His son, Dr. Hugh Henry, lives at Eagle Mills.

MAJOR JOHN H. BELL.—Major John H. Bell of Arkadelphia, age forty-five, died at Fort Sill, Oklahoma, March 5. About a year ago Dr. Bell received a commission as a lieutenant in the Medical Reserve Corps and was soon promoted to captain and just recently to major. Major Bell is survived by his wife and one son.

County Societies.

BOONE COUNTY.

(Reported by F. B. Kirby, Secretary.)

The Boone County Medical Society met March 5, at Harrison. Present: W. H. Poynor, H. L. Routh, J. C. Blackwood, J. H. Fowler, L. Kirby and F. B. Kirby. The scientific program was as follows:

"Variola and Varicilla"—By Dr. J. H. Fowler.

"Medical Ethics"—By Dr. L. Kirby.

"Clinical Cases"—By Drs. W. H. Poynor, J. H. Fowler and H. L. Routh.

"Business Methods" will be the topic for June 4.

A resolution was adopted requesting our U. S. Senators and District Congressman to support S. 3748 and H. R. 9563, the Owen and Dyer bill to give the same grades to Army Surgeons as are held by medical officers in the Navy.

Book Reviews.

NOTES FOR ARMY MEDICAL OFFICERS.—By Lt. Col. T. H. Goodwin, R. A. M. C., with an introductory note by Surgeon-General William C. Gorgas, U. S. A. Illustrated. Published by Lea and Febiger, Philadelphia. Price, $1.00.

This little book is the outcome of a series of lectures delivered at the Army Medical School in Washington; and based upon the long practical experience of the author at the front, and includes much information which will be of great value to those who go abroad on active duty.

OBSTETRICS.—By Joseph B. DeLee, M. D., with the collaboration of Eugene Cary, M. D. Volume VII. Price, $1.35.

PHARMACOLOGY AND THERAPEUTICS.—By Bernard Fantus, M. D., and PREVENTIVE MEDICINE.—By Wm. B. Evans, M. D. Series 1917. Volume VIII. Published by the Year Book Publishers, 608 S. Dearborn St., Chicago. $1.50.

The above two volumes are from the Practical Medicine Series comprising ten volumes

on the year's progress in medicine and surgery. Under the general editorial charge of Dr. Charles L. Mix, Chicago.

Technic of the Irrigation Treatment of Wounds by the Carrel Method.—By J. Dumas and Anne Carrel. Authorized translation by A. V. S. Lambert, M. D., with introduction by W. W. Keen, M. D. Published by Paul B. Hoeber, New York. Price, $1.25.

In this book no attempt has been made to teach surgery or to explain how and what cases the treatment is employed, but as Dr. Keen says: "That every surgeon who has to do with industrial and other accidental wounds should know this technic by heart and practice it with exactness."

A Brief Introduction to the General Principles of Therapeutics.—By Francis H. McCrudden, S. B., M. D., Director of Laboratories, Robert B. Brigham Hospital, Boston; Assistant Professor of Applied Therapeutics, Tufts Medical School, Boston. Published by Gregory, 126 Massachusetts Ave., Boston. Price, $1.50.

The author of this book treats therapeutics as a science. It can be used to supplement a practical clinical course, thereby eliminating some of the didactic instruction, so that the clinical instruction can be devoted entirely to illustrating how the principles are actually applied, and the results of treatment.

Diseases of the Heart.—A clinical treatise for the general practitioner. By Edward E. Cornwall, M. D., Brooklyn, New York City. Published by Rebman Company, New York. 1917. Price, $1.50.

This book deals in a practical manner with many important things in the diagnosis and treatment of diseases of the heart. The "feel percussion" described and the conception presented of the blood pressure scale and the relation to it of the various pressure phases, may possess novelty. The use of strophanthus as a heart stimulant is described with considerable fullness. A short discussion of cardiovascular disease is added.

A Manual of Anatomy.—By Henry E. Radasch M. Sc., M. D., Assistant Professor of Histology and Embryology on the Jefferson Medical College, Philadelphia. Octavo of 489 pages, with 329 illustrations. W. B. Saunders Company, Philadelphia. 1917. Cloth, $3.50 net.

This book of intermediate size should be quite popular among medical students and others interested in the study of the visceral anatomy. It is also desirable for the review of osteology, syndesmology, myology and blood-vascular and nerve systems. The semilunar valves of the aorta and pulmonary artery are described in all anatomies under the ventricles, without justification from a standpoint of anatomy and embryology. In this book they are described in their respective vessels, where they should be taken up. Many other new and instructive features are given.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia. Volume III. Twenty-seventh series, 1917. Published by J. B. Lippincott Company, Philadelphia. Price, $2.00.

Among the many interesting clinics described in this volume we wish to mention the article by Dr. Wayne Babcock on "Experiences in Reconstructive Surgery of the Extremities." He gives his experiences on the transplantation of members from one person to another by a two-stage operation; the restoration of parts apparently gangrenous; skin grafting and flap-transplantation; partial crush of the hand, and other instructive procedures.

History of Medicine.—Suggestions for study and Bibliographic data. By Fielding H. Garrison, A.B., M.D., Principal Assistant Librarian, Surgeon General's Office, Washington, D. C. Second edition revised and enlarged. Octavo of 905 pages with many portraits. W. B. Saunders Company, Philadelphia, 1917. Price, cloth, $6.50 net; half Morocco, $8.00 net.

The author of this splendid volume states that the book is written with a definite literary intention, that of stimulating the physician and student to do his own thinking and research by interesting him in the subject at the start. The table of contents is as follows: The identity of all forms of ancient and primitive medicine; Egyptian medicine; Sumerian and oriental medicine; Greek medicine; The Bazantine period (476-732 A. D.); The Mohammedan and Jewish periods (732-1096 A. D.); The Medieval period (1096-1438); The period of the renaissance, the revival of learning and the reformation (1453-1600); The Seventeenth century; The age of individual scientific endeavor; The Eighteenth century; The age of theories and systems; The Nineteenth century; The beginning of organized advancement of science; The Twentieth century; The beginning of organized preventive medicine.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., APRIL, 1918 No. 11

Original Articles.

LABOR, WITH SPECIAL REFERENCE TO THE USE OF PITUITRIN, MORPHINE AND INSTRUMENTS.*

By A. G. Harrison, M. D.,
Searcy.

It is impossible in the short length of time allotted me to anything like cover the management of labor, even though I should confine myself to normal labor. Therefore, I propose only to touch upon a few points which experience has taught me to consider of very great practical importance.

Normally, labor is a physiological condition and needs no management; in fact, a purely physiologieal condition is frequently converted into a pathological one by management. If old dame nature did not ignore, correct and defy management of her affairs in this ordeal, the graveyard would have to be enlarged to accommodate the poor unfortunates being "managed" out of this life into eternity.

The mortality in puerperal conditions would be materially lessened if the management of labor was limited to the cutting of the cord and dressing of the stump.

The pernicious practice of frequent vaginal examinations, the indiscreet use of that very potent drug—pituitrin, the unnecessary and unskilled application of instruments before and during labor, together with the inexcusable practice of pulling upon the cord, the use of the curette and intrauterine douche after delivery, has sacrificed more lives than have ever been saved by the earnest efforts of our most skilled obstetrician.

It is not the purpose of this paper to deprecate the true accoucheur, but to decry the criminally dangerous practice of those who persist in the indiscriminate use of pituitrin and instruments and neglect the use of the most valuable of all agents, morphine. If I were limited to one drug in my obstetrical bag, morphine would be that one. The indications for its use are greater and the results obtained are more satisfactory than from any other therapeutic agent. One-sixth to one-fourth grain of morphine combined with atropine given hypodermically will readily quiet the extremely nervous patient, soften the firm, rigid os, allay nausea, relieve cramps in the thighs, ease the pains in the back, relax the entire birth canal, control puerperal convulsions, relieve painful and irregular uterine contractions and will not arrest true labor. The pain that morphine will arrest is not the pain nature intended to effect a delivery.

The profession has labored under great difficulties in the past for the lack of a dependable oxytocic. Ergot, which stood eminently alone in this class for many years, is so faulty in preparation and uncertain in action that we never know what to expect from its administration. Whether it will increase the severity of the uterine contractions and allow the period of rest as demanded by nature or produce tetanusuteri, convulsions or collapse. Personally I have never seen any effect from the drug one way or another. I never give it before nor during labor; but when there is a tendency to uterine inertia after delivery, I order thirty minim doses of the fluid extract every two or three hours until a firm contraction is had. I leave my patient feeling a certain degree of security; but I wonder if this feeling is any more justifiable than that of the fellow who carries a buckeye in his hip pocket to protect him against the piles. There are some very good men of my acquaintance who give large and frequently repeated doses of quinine during labor, and claim much for its action; but I could never get the consent of my conscience to add cinchonism to the nerve racking ordeal of labor. The practice of obstetries has been wonderfully revolutionized by the advent into our armamentarium of a real and powerful

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

oxytocic. But, like most powerful therapeutic agents, it is equally potent for good and evil. Pituitrin, used judiciously, will prove a boon to suffering parturients; but as it is used it will work havoc and ruin, leaving death, sorrow and suffering in its wake. There are, according to some observers, several indications for the use of pituitrin, but in my opinion, based upon personal observation, there are only two, viz: uterine inertia and post-partum hemorrhage. I say uterine inertia conservatively, for there are contraindications to its use in this condition. It should never be given until the os is thoroughly dilated and the pelvis outlet known to be sufficient to permit the passage of the baby in-utero. Some patients are extremely susceptible to its action; therefore one should give a small initial dose to ascertain the individual's susceptibility. I have frequently given one c. c. (obstetrical strength) and brought on such violent tonic contractions that I was compelled to give ether almost to the stage of surgical anesthesia before any relief was had. Then, again, there are patients who seem to be almost immune to its action. To one patient I gave one c. c. every thirty minutes until four doses were given, without any appreciable effect. Berkley and Bonney have truly said pituitrin should rarely be given to a primipara and not to a multipara until it is absolutely certain that the relation of the head and pelvis are normal and the cervix sufficiently dilated to deliver the child within thirty minutes; for the drug, by causing a degree of tonic contraction, tends to asphyxiate the child. But, I think they should have added to this lubrication and relaxation of the vagina and perineum.

The above conditions, plus uterine inertia, constitute the one paramount indication for pituitrin and the happiest results are realized in nine out of every ten cases from its administration. In twenty or thirty minutes the cries of the new-born rend the atmosphere, the mother rejoices, the doctor draws a sigh of relief, one grandmother begins scorching a rag and the other rushes to the kitchen for a piece of fat bacon and father hides his poeket-book.

The first six years I practiced medicine I used instruments twenty-four times and felt very proud of the achievement. I am now ashamed of the record. The last ten years I have used forceps three times and feel that in at least one of these cases it was unnecessary and unwise.

The low forceps operation is very rarely necessary and the high should never be done. The dangers to both mother and child are so great that the procedure is wholly unjustifiable. The obstetrician who is sufficiently skilled to properly adjust forceps to the child's head before it is engaged in the bony pelvis and effect a delivery without serious damage to the lower segments of the uterus, the bladder, vagina and perineum, is equally competent to do an abdominal Cesarean section which gives the babe and mother a far better chance for life and health. Podalic version should always be given the preference, if it can be performed without seriously tearing the uterus. The child should be brought down until the head is firmly engaged in the pelvic outlet, when a light, short Elliott forcep may be applied to the after-coming head and traction very cautiously made to correspond with the labor pains.

Abdominal Cesarean section is becoming so popular that the old axis traction forcep will soon be relegated to the junk pile. The ergot and quinine obstetricians are being driven to the bushes by men of more modern training, and it only remains for the pituitrin enthusiast to realize he has a two-edged sword in his hands and he must limit its use to cases wherein it is positively indicated and no possible contraindications; then the mothers of our country will have what they are entitled to, PROPER MANAGING OF THEIR LABORS.

ADMINISTRATION OF ERGOT BEFORE AND AFTER LABOR.*

By V. L. Pascoe, M. D.
Newark.

Is there a proper indication for the administration of ergot before or after labor? As a justification for presenting a paper of this kind I can at least claim some degree of precedence. As I do not think ergot is generally disregarded by obstetricians. My desire is to elicit the general consensus of medical men of this State as to the use, or uselessness, of the drug ergot in any stage of labor before or after the birth of the child.

This paper shall not deal with any general

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

history of the drug, nor shall it take into consideration the number of authors of note who recommend its use. I shall only present to you some thoughts rather why it is not a drug of any particular value.

I think I will be fairly correct when I state the first use of ergot in labor was to heighten the pain. This, I think, was the first use to which the drug was put by physicians, and again I believe that I will be fairly in accord when I say that purpose of the drug has been superseded by other more acceptable ones. This, then, dismisses its importance in the condition for which it was first used.

I wish to now more thoroughly define the title; I mean those conditions arising during labor, and the dangerous period immediately after, say six hours.

Referring to the second state of labor it probably was and may now be used by some after dilation to enhance pains and hasten delivery. While its use as above stated was I am sure, at one time more general than it is now, I am of the opinion that doctors rather resort to its administration during the second stage. Their general reasons for discontinuing its use during this stage may be summed up as follows:

The danger of producing rupture of the uterus and having tetanic contractions preventing the natural and easy delivery of the placenta. The teachings of a great many men of note rather strongly recommend the use of ergot after the completion of the second stage with the main object of preventing that most dreadful of all conditions—postpartum hemorrhage. Now, it is at this particular time of labor I wish to more particularly speak. Should you administer ergot before the completion of the third stage you will probably have the conditions of tetanic contractions and retained products to contend with which may be of such degree as to force delivery by the combined crede method which, of course, is to be avoided.

Now I wish to insert a query. Is it rational to give ergot before the completion of the third state of labor with no other reason than to forestall a probable hemorrhage, which is very likely not to occur, and thus place your patient in a condition of slow completion of the third stage with the dangers of an hourglass contraction enhanced by ergot together with delivery of placenta membranes more difficult? We all recognize that membranes are easier to come away when the womb is going through its rythmical contractions with periods of relaxation, than when you have a uterus in tetany such as ergot produces.

Who of you have not had, after giving ergot, a delayed completion of the third stage, necessitating a combined crede method; and, then, on introducing your hand into the vagina, have not encountered a closed, rigid os, and after overcoming this rigidity and entering womb been astonished as to the distance you would have to insert your hand before the top of placental attachments and how relaxed the upper uterine segment was rather indicating the ergot was acting on the lower uterine segment rather strongly while the upper segment seemed inactive. As to why this occurs I am unable to make an explanation that appears a satisfactory one, unless it be a paralysis temporary of the fundus, which does occasionally happen.

Now, as to the administration of ergot after completion of all stages of labor given to control an already existing hemorrhage that is unquestionably the time when its administration is more often resorted to. Say you have a hemorrhage and have given a dose of ergot hypodermically—which takes of course some little time—is not the short time consumed in giving the dose probably the very time in which you might lose the patient? And do you feel any greater security as one would feel after resorting to those quick and almost certain mechanical means of controlling uterine hemorrhage?

SUMMARY.

The administration of ergot before the entire completion of labor is unwise and probably harmful. Its administration after the completion of labor offers some obstacle leaving some doubt as to its advisability.

One condition only points clearly to its exhibition, namely inversion of uterus.. After correction another indication or rather reason for its administration might be mentioned, that is if you have anything in the womb you wish to remain.

This arraignment of ergot may appear rather harsh, but I assure you it was not written with that intention, but rather from personal experience and the experience of a number of doctors of repute.

DISCUSSION.

Dr. C. S. Pettus (Little Rock): The subject of obstetrics is one of the most important subjects that we have. The proper management of a case of labor

should certainly be one of the most desired aims at the hands of any doctor. In the management of labor the comfort of the patient is due largely to our ideas as to the administration of anaesthetics and anodynes, as well as the proper care of the patient in watching the progress and determining procedures which may demand the use of forceps. There have been different opinions as to the use of instruments from the introduction of forceps until now. I have relieved a great deal of suffering by the use of forceps, and when they are properly used, I consider they are the most valuable instrument that we have to deal with any condition. Many cases of labor are allowed to go on and suffer unnecessarily when all of this could have been relieved with the forceps. The great danger with forceps is the early and late usages of them. The suggestion is so well understood that it demands no elaboration.

As to ergot, I have gone through thus far of my practice without any assistance whatever from that drug.

I have used pituitrin rather extensively for the last three and a half or four years. I have used it in all cases in which it was indicated that have come under my care during the time mentioned. I have found this, that pituitrin lessens the demand of the forceps.

My statement of pituitrin may sound paradoxical to my statement of the forceps, but the reason that we have been forced to resort to the forcpes is due to the inertia of the muscular structure of the uterus, and to expel the baby something physiological or mechanical is demanded, and physiologically there is no such another drug as pituitrin.

The one drug, morphine, that the doctor would choose if forced to accept just one drug to place in his obstetrical bag, in a general way I agree with him. I resort to morphine in almost every case of labor. At the beginning of labor I give a hypodermic of morphine and atropine which determines for me whether it is actual labor. If the patient is relieved I feel it is safe to retire and take a nap.

Obstetrics is one of the most attractive branches in our profession, and I heartily agree with the doctor that it is a branch that is neglected in many instances. Labor is a wonderful demonstration of nature, and its kindness to many physicians through its normal action has innocently given some doctors a reputation unearned. The history of the ignorant midwife and her imaginary achievements as to her own idea of her dexterity and ability which she so sagaciously reflects to those who come under her care, excepting in pathological or abnormal cases, at which time a scientific doctor is needed, impresses me with two thoughts, the correctness of predestination and foreordination, and the kindness of nature to hide for months and years the destruction caused through ignorance, which later is adjusted by the surgeon or relieved by Him who is wisest of the wise, who realizes the destruction is so extensive that the patient is better off in His hands than in the hands of the surgeon, and the requiem is sung . Thus ends the chapter of the ignorant obstetrician, be it doctor or midwife.

Dr. G. A. Warren (Black Rock): There is another paper that should have come in here, and that is Dr. McCarroll's paper. It is on the same subject, and very much in line with the two that have been read.

Now, Dr. Harrison spoke about pituitrin being sometimes inactive. I have used it. I haven't used it recklessly; at least, I don't think I have. I have used it in something like a hundred cases, with no bad results, except I find it disintegrates.

Now, pituitrin, like any of the other animal products, rapidly runs out of date; it becomes inert; sometimes before even the specified time for using it. But, my experience has been that it is the most nearly perfect speeific that I have ever seen in medieine. In all of the instances in which I have ever used it, where I had reason to believe that the medicine was active, I have gotten results. So much so that so severe were the clonic contractions that I got from using a full c. c., that I make it a rule never to give a full e. e., as my initial dose. I can give a second, or even a third dose, and give a half c. c., and I usually don't need to give even the second. One half c. c., does the work, and does it entirely. And, I have, as I say, never had it to fail, except where I had reason to believe and know that the product was inert. I had one case in which I gave a half c. c.; in a minute the woman was wild, and it took four to hold her on the bed. It didn't seem to increase the contractoins of the uterus. If it did, I could not tell it. I was looking after her nervous condition, and her general mechanical cramps and convulsive movements. There was no history of high blood pressure in that case. Of course, those things we have to look out for. After the pituitrin had died out, I went ahead and delivered her with the forceps. There were no bad results. No bad pains, no evidence of any kidney poisoning.

In another case I gave a full c. c., and there came on a tonic spasm that never quit until the child was born, about three minutes. One continuous contraction of the uterus expelled the child, with more or less laceration, and yet it was about the fourth or fifth child. So that I don't think it is ever good practice to ever give a full c. c. as your initial dose, unless you have used it on the same patient before.

I have used strychnine and quinine also with more or less negative effects.

Dr. H. R. McCarroll (Walnut Ridge): As to the use of forceps Dr. Harrison said that he only used them three times in ten years. We have cases occasionally where we have to use them. Like him, I wish to emphasize the fact that the promiscuous use of them in almost every case of labor cannot be too bitterly condemned, especially in high applications. It is a very hazardous undertaking to make high forcep deliveries, and if this is to be undertaken, one wants good help, and the position of the child should be studied with the whole hand in the vagina under full anesthesia. Successful deliveries can be made, but the operation of version in many instances is to be preferred. Forceps often have to be used to overcome a rigid perineum, and it is better to use them rather than to subject the mother to too great a strain or the parts to too long continued pressure for fear of sloughing.

Dr. G. E. Cannon (Hope): With reference to the use of ergot, I think it is seldom necessary. When we have delivered the after-birth, you generally press down with the left hand upon the uterus and hold it for a little while. You help to quiet the patient, and also contract the uterus. You stop practically all hemorrhage, unless there is some laceration that can not be controlled by the ergot. I rarely ever use it.

As to the use of the forceps, my experience is just the opposite of some of those given. I use them frequently. In the case that the doctor just mentioned, where the head comes down, we often times see that they will labor for three or four hours. We watch them for a little while. We can tell whether there is any progress or not, and give our patient just a little anesthetic; and, if you have the right kind of position, you can often times deliver in fifteen minutes without any pain. And, my experience has been that I have had fewer lacerations, fewer cases where there was traumatism, a great deal fewer, than I have after the use of pituitrin in those cases. I will say that I have a pair of forceps that

I have used for eighteen years, and I wouldn't know how to attend a labor case without them.

Dr. O. R. Stewart: As to ergot, in my work I give it once in a while after the pains are all over. In fact, when I start to go home I leave a little bottle and tell them to give it if hemorrhage should set in. I find it valuable there.

As to morphine, I never have used it. I prefer chloroform, if the pains are hard enough and I want to relieve them.

As to the forceps, if the os is well dilated, I give a small dose of pituitrin, and, if it does not start these pains, I believe it is a very good idea to do a podalic version in those cases. I do it very often. I prefer that. If I am not sure about my position, as the doctor suggested, when you give pituitrin to start up a contraction of the uterus, with the os well dilated, if the child is not pushed down, I believe it is a good idea to do a podalic version. I don't feel under those circumstances that you will ever get a blue baby.

Dr. J. C. Land (Walnut Ridge): As for pituitrin and the forceps, I think they constitute the main chapter in our little obstetrical book. If pituitrin is used after complete dilation, there should be no apprehension as to trouble, so far as the uterus is concerned. But, when the head rests on the perineum, and where the pituitrin does not work, then I think it resolves itself into an instrumental case.

Dr. Pascoe (in response): I am somewhat gratified to learn that nearly all of us agree on this administration of ergot. Our early teaching—or at least mine some 25 years ago—was that, when there was complete dilation, and the child's head was resting on the perineum, a dose of ergot should be given. I followed that for the first few years of my practice, and found I had lots of trouble. I didn't know what was the matter. I thought I was doing what I was advised to do. Since I have ceased the administration of ergot I have had no trouble. I haven't in ten years had a case of contracted womb preventing the delivery of the placenta.

I would like to say a few words about the forceps. My experience is that I really believe we ought to use them often when we do not. I make a practice of using them, especially in these low cases, where they are slow about delivering. And, as to this great fear or danger of laceration, I think that is just a question of being slow and going in and taking your time in the use of the forceps. I believe that I could more easily prevent a case of laceration with the use of the forceps than I could without them. (Applause.)

Dr. Harrison (in response): It is not my object to decry any of these things except the high forceps operation. I think the forceps has its place. I think pituitrin has its place. Morphine certainly has first place. Ergot, perhaps, has some place: I don't know. But the indiscriminate use, the reckless use, of any of them is very bad and that is being practiced in some sections of the country now, maybe only back up in the hills where we know very little, but it is certainly being done, and that was the thing that prompted me to write this paper. Some men, for whom I have the profoundest respect and regard, have laughed at the idea of giving a patient morphine when she was suffering all the agonies possible, with the os rigid and not dilating the least bit in the world. They would turn right around and insist on giving that patient pituitrin. I want to know how many doctors believe that way. I heartily agree with the doctor who said, "No obstetrical bag is complete without a pair of light forceps." When the head is bulging the perineum and lodges there for an undue time, certainly a pair of light forceps should be applied and the delivery hastened. You hardly need an anesthetic. I do not think the high forceps operation is ever justifiable when the consent of the patient and family can be had for an abdominal Cesarean section, since the former procedure nearly always means an accidental vaginal Cesarean section with irreparable damage to the entire birth canal.

PREGNANCY AND THE MANAGEMENT OF NORMAL LABOR IN COUNTRY PRACTICE.*

By Sam J. Allbright, M. D.,
West Point.

In the short paper that I shall present today, I shall not endeavor to cover the entire subject, but only to touch upon some of the most important points as they come to my notice in a country practice.

There is not much to be said of normal pregnancy as it will "get along" without management. Many times the first a country doctor knows of a woman being pregnant is when he is called to wait upon her in confinement and ofttimes he is informed of this after he has made an eight- or ten-mile ride to see such patient. Occasionally however, some poor misguided woman comes to the doctor with the information that she has "missed" and wants some medicine or an operation to regulate her periods. Others still (which class is on the increase in the more enlightened parts of our country), who are very desirous of good health and healthy offspring, come to the doctor for information in regard to care of themselves. This, in my opinion, should be encouraged and to these women should be given an outline of what they may expect, with instructions to keep in touch with their physician and inform him if any pathological condition arises.

Medicine has little place in normal pregnancy. Occasionally a woman may need a laxative; but exercise to slight fatigue every day with the proper attention to diet will suffice. Insist that she have fresh air and make her surroundings as pleasant as may be; also that she keep regular hours with plenty of sleep.

Because of the inaccessibility, as I said before, of many patients, and because of the fact that the doctor does not always know the nature of the case when called, many times he reaches these patients without any means of helping the woman other than the knowl-

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

edge he has gained of the mechanism of labor and the two hands God gave him. But even this predicament does not justify the neglect of aseptic precaution. One can always have fire and water and some kind of soap, which combination, if used vigorously, is fairly safe. The preparation of the patient in the way it would be done if she were in a hospital—so far as my experience goes—cannot be carried out to an advantage. Women are so accustomed to getting along without having the vulva shaved, bathed and packed in mercuric chloride that they resent it as an imposition. Also, the pre-labor enema are only useful in causing an irritation of the lower bowel so that defecation takes place during labor, which condition is not only embarrassing to the patient but makes a new source of danger of sepsis. The same may be said of the use of hot bichloride cloths on the vulva during the second stage of labor. This conduces to relaxation and tends to prevent a tear; but if the same cloths or towels are used repeatedly, they become a likely source of infection from having come in contact with the anus and discharges therefrom.

I would here sound a warning against meddling. I am thoroughly convinced that we make too many vaginal examinations. Obstetricians in hospital work are now advocating no vaginal examinations; but this is such a radical change for us who practice in the country, that I fear it will be some time before we get to it. However let us temporize by making few vaginal examinations, none of which should be made after the rupture of the amniotic sac, unless absolutely necessary.

I feel sure a large per cent of the injuries to the woman and the child during labor are caused by the interference of the physician in trying to hurry the process. If we are too busy and have not the time to properly attend a woman in confinement, we should refuse to go when called. After accepting a call of this kind we would be doing the woman a grave injustice not short of criminal if by our haste we cause injury. This applies to the forcible dilation of the os, manipulation or massage of the inner border of the os, premature rupture of the membranes by external force, and last but not least the giving of pituitary extract before the os is fully dilated or dilatable.

As I should have said in connection with asepsis, if external rupture of the membranes is necessary it should be carefully performed with a sterile instrument. I know of a physician, who it is said, carries a horseshoe nail in his vest pocket and uses it on case after case without even washing it. Well, the nail would not be such a bad instrument even if crude, the end being protected while being introduced; but he should at least boil his nail every time before he uses it!

Another neglected feature in the practice of obstetrics by the country physician is the inspection of the perineum and its repair if lacerated. While most women appreciate our work more if they are not exposed (that is, if the work is done under cover), there are very few but will think more of us if we look to see if they have a laceration. And, if we let a laceration go unrepaired, that woman will always feel like we did not do our duty. If we have a tear and are doubtful for some reason of getting complete results, we are not justified in passing it; because if we get results, it will much improve the conditions and leave a smaller and easier task for a subsequent operation.

A PLEA FOR MORE EFFICIENT WORK IN THE LYING-IN CHAMBER.*

By H. R. McCarroll, M. D.,
Walnut Ridge.

It has been said that man advances in proportion as he mingles thought with his labor. It seems that we might also say that man advances in proportion as he mingles thought and energy with his labor. Every thoughtful and energetic physician ought to be able after a few years of well applied labor to give to his colleagues some useful suggestions. It is the dissemination of these thoughts that make our society meetings worth while.

In choosing this subject, I believed that some good might be done. For if I have no new thoughts to present to you, a careful review of the situation as ordinarily encountered while attending women in confinement, ought to inspire us and do us all good.

In laying upon women the awful trials of bearing and raising children, it would sometimes seem that the All-Wise Creator had been unfair to this sex, and it is hard to convince most women otherwise, and for this reason all people who assist them in this work

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

should realize the terrible responsibility of doing it well. Every practicing obstetrician should aspire to leave every woman in as good condition as he found her and unless he strives to do so, it would be better for humanity in general for him to choose some other vocation. We should be pleasant and by exercising great patience strive to alleviate pain and suffering so far as this can be done without jeopardizing the life of our patients (mother and child).

PREPAREDNESS.

In entering the obstetrical chamber, I want to say something of our equipment. We should be alive to the much talked of today "preparedness." Our obstetrical bag should contain all necessary instruments for this work: rubber gloves, umbilical tape, gauze, needles and holder, suturing material and plenty of medicines. I want to lay special stress upon antiseptics beginning with soap. Every doctor should carry his own soap. Some of the antiseptic soaps put up by the pharmacists, or one that I like better is simply the tr. of green soap. To use the family soap, especially if it has been used, might be a fatal mistake. If this becomes necessary, see that all the outside surface was removed before the final cleansing. Besides the bag above mentioned, we should carry a sterilizer, and at least three granite pans, of different colors, so that we would not get our solutions mixed up. On obtaining boiling water, I have my pans scrubbed with soap and water, and then rinsed with boiling water. I then have one pan filled with boiling water say half full. Into this I drop my antiseptic tablets, and set to one side to cool. If rubber gloves are to be used this water will be ready to receive them. If in a hurry, cooling can be hastened by setting in cold water. The rubber gloves should be boiled about ten minutes. The hands should be thoroughly cleansed, using a good nail brush. By the time you have finished this first washing some one has brought you a towel which may be used at this time as you do not wish to disappoint the folks, but at no other time until after the initial examination has been finished is a towel permissible. I have seen physicians many times wipe their hands with an unsterilized towel just prior to making the examination. After the toilet of the nails, the hands should again be anointed with green soap and alcohol and again thoroughly scrubbed. Then we are ready for the antiseptic solution which should be used five minutes by the clock. If the rubber gloves are to be used, putting them on can be facilitated by use of the tr. of green soap as it is a fine lubricant for this purpose as well as for making vaginal examination instead of using some unsterilized vaseline or lard as I have seen used on many occasions. In making the examination, an assistant should wait upon us and care should be taken not to allow the examining fingers to touch anything. Should an accident occur, we should have the courage to go back and sterilize again. With the fingers of the left hand carefully separate the labia so that the fingers of the right hand may enter with the least possible chance of infection.

This examination should determine whether the woman is actually in labor or not, the presentation as far as possible, the size of the birth canal, condition of the soft parts, etc. One should determine whether the child is living, and if the labor is well advanced, its condition. If the labor is well started, the kelly pad should be placed in position after having covered it with some clean cloths. During the first examination the womb may be dilated some by the examining fingers if the condition warrants it, or if it has been dilated, the perineum should be dilated to the full extent of the distended fingers. Care should be taken not to do this too soon for fear of swelling and edema. Wait until the head is down on the perineum. The character of the labor should guide the physician as to how close to watch the perineum. It is certainly embarrasing to have a head pop out unawares, especially in a primipara, and have a first or second degree laceration result, as I had in one case. All preparations should be made for the expected reception, such as preparing its blanket and having it warm, as well as all of its clothes, tape for the cord, etc. I use silkatine thread, which may be sterilized in the bichloride solution or with boiling water. If the presentation is a breech, the sterilizer should be brought into action and the forceps, some towels, and needles, needle holder and silk worm gut for use in case of a tear. One towel should be saturated with sterilized lard, not vaseline, for the purpose of wrapping the child to prevent its trying to breathe before the head is delivered. As the body emerges follow up with the oiled

towel. After the shoulders are delivered, the body of the child should be raised by an assistant while the operator passes two fingers up to the child's mouth separating them to provide a breathing passage for the child. After a few well directed pains, if the head is not delivered, some traction upon the neck and the mouth of the child is permissible, and if this does not suffice, the forceps should now be brought into use. In the use of forceps, one should use the strictest care not to soil them. We have all seen doctors hand them to patients with non-sterile hands or lay them upon a table or bed. Also introduce them without using any antiseptic care in sterilizing the vaginal entrance. I do not believe any forceps delivery ought to be made without covering over the parts of the mother to prevent hands and forceps from touching them. Just one towel with a slit in the center just large enough to work through offers almost perfect protection. I recently heard of a physician packing the uterine cavity with pieces of flour sacks and sheets without any regard whatever to sterilization. Of course, such work as this invites the most bitter condemnation. All physicians who can not make an instrumental delivery without breaking their chain of asepsis should no more undertake it than they would an abdominal operation. A puerperal woman is largely a helpless creature, and he who would dare cross her sick chamber should do so in fear and trembling, realizing the great responsibility and remembering that she is a benefactor to mankind.

HELPFUL AGENTS.

I would mention chloroform, morphine, hyoscin and pituitrin among the most useful ones. I want to say that an eighth of a grain of morphine and one two hundredth of a grain of hyoscin given hypodermically after the suffering has become almost unbearable will give great relief. Chloroform given cautiously and slowly on a small folded handkerchief is one of the greatest boons to puerperal women that I have ever witnessed. It is my custom when I have the time and assistance to deliever practically all primipara under full anesthesia. Pituitrin is a very useful agent when properly used. It should never be used when the birth canal is not only large enough but when it is clear. It should not be used when the pains are good nor to hasten delivery that the medical attendant might secure sleep. It should not be given in large doses unless you know something of the idiosyncrasies of the patient. It is a very prompt and most powerful agent in some cases and if the canal is clear and the presentation certain it can be given cautiously in uterine inertia, and in postpartum hemorrhage.

Once the delivery has been completed, two things immediately demand the doctor's attention, viz: the care of the womb and the oversight of the baby. If possible reduce the womb while the baby is being removed. If the baby demands all of your time, have an assistant watch the womb if you are going to be occupied for some time. At this point some physicians and nurses lose their heads. Babies have been dipped in almost boiling water in an effort to resuscitate them, and so badly burned that they died in a few days. After the baby has cried lustily and has been made comfortable in the already warmed blanket, the mother should next have our attention. If the womb is well contracted, watch it until the cord has practically quit pulsating when we again turn it over to an assistant and proceed to tie the cord. Did any of you ever hear of a baby dying from hemorrhage of the cord? Have you heard of such an incident lately? We believe that this accident can be prevented. If you will pick up the cord six inches from the belly of the infant, strip out the Wharton's jelly and tie two ligaments upon it say half inch apart. The distal one from the infant does not need much attention, but the proximal one should be at least eight inches long and securely tied in a surgeon's knot so that the ends of the suture will be of equal length. The cord is then severed, and the proximal part is then folded back and again tied with the same suture about one inch from the belly of the infant. I do not claim this method to be original with me, but after thirteen years of continuous use, I have never seen a cord bleed enough to stain a band.

AFTERBIRTHS.

Some twenty or thirty minutes should elapse before the delivery of the afterbirth. The most terrible hemorrhage that I have ever seen after labor followed the delivery of an afterbirth in about two minutes after the birth of the child. It should undergo a rigid inspection always.

LACERATIONS.

The mother should be inspected for lacerations. If found to exist, they should be immediately repaired provided everything is favorable, and if not, it should be postponed for better lights, assistants, and a better condition of the patient. Where the labor has been a trying one and attended by shock, it is best to wait for some five or six days until the patient has somewhat recovered and passed over the danger of sepsis. A glass catheter should be used to draw off the urine should this become necessary.

AFTER-ATTENTION.

I believe the doctor should carefully attend to the woman's toilet himself and see to it that everything about her bed is clean and the vulva covered with sterile gauze or a clean cloth well scorched. These pads should be worn until well, changing them, of course, as often as needed. She should be protected against afterpains and the condition of the breasts carefully guarded. The baby's eyes should not be forgotten. One per cent solution of silver nitrate should be dropped into the baby's eyes, especially if any suspicion rests upon the case. Its temperature should be looked after. Sterile water should be given warm quite freely to flush out the bowels and kidneys.

This concludes my paper, and it has not been given for the purpose of advancing many new thoughts, but as an earnest appeal to all physicians to make new resolutions to do better work in the lying-in chamber for the sake of humanity. Let us be so kind and perfect in our attendance to women in this trying ordeal that they will always be our friends and that they will forever decide that physicians only should be entrusted to the important work of ushering in the new-born. Also should our attention to the little fellows be so perfect that we would never be ashamed to meet them or made to feel badly because of a neglected eye or some other physical deformity.

DISCUSSION.

Dr. C. S. Pettus (Little Rock): I wonder why the chairman called on me to open the discussion on these papers, as I have never been known as obstetrician, however, any man doing general work as I have done, ought to be an obstetrician.

These two papers call me back to my early days in medicine and the proudest experience of my life is the two years that I spent in practice in the country at Smackover, Arkansas. From that experience I am in a position to appreciate these papers.

Ordinarily I do not refer to my appreciation of papers read at societies. I have never felt that they were entitled to any place in the discussion, but these papers are so commonplace and so valuable to us all, and deal so delightfully with practical points that it may be of value to all the doctors over our State, and most especially the backbone of our profession, those who practice in the country, that I cannot refrain from expressing my appreciation of them.

I recall my early experience when ingenuity was demanded, how I had started on my rounds which consisted of a square of from twelve to twenty miles, and on my circuit I have been called in on a case of obstetrics without any preparation and with no paraphernalia excepting my saddle-bags, in which the only weapons to be used in my defense and the defense of the patient were bichloride and carbolic acid. I consider any man unfortunate who has not had such experiences, and these papers are really text books for the beginner in country practice.

Dr. Ollie Parker (Elaine): I wish that some of the boys in the city could come out in the country and help us with some of those conditions we have to have out there, where we can't do that. Lots of times in the country practice we get a little note saying, "Come to the place." We don't have any idea what's going on up there. I remember one time just last summer I had been out on an obstetrical case, and had my obstetrical bag, or part of it, in my car. A little note said, Come up to place so-and-so, and be quick, just ten miles away. I got there at nine o'clock that night. I found a little "nigger" girl about 15 years old, who had had convulsions for about two hours when I got there. The os was very tight. It was in a "nigger" cabin, and the bed was made of shucks, and the pillows of corn silk. I took my fingers and dilated the os, and at three o'clock that morning I delivered that child with the forceps. I threw my forceps down on the bed, or anywhere, because the girl was having convulsions, and I didn't have time to go back to town after the rest of my business. That girl got well, without any other convulsions after that. And right the reverse of that, I had a case that I attended like I was taught when I was in school, with all these necessary appliances that men's minds can think of today. Infection, puerperal septicemia and death resulted. This was a patient that I really did try to take care of. While I was up there in that little "nigger" cabin, throwing these forceps around anywhere on the floor and on the bed, invariably I would take my hand and remove corn silk from the vulva. I want to thank Dr. Allbright for his little paper on that point. I appreciated it.

Dr. J. C. Land (Walnut Ridge): All I want to say is to compliment Dr. Allbright on his paper, one of the best papers I think I have ever heard presented. Speaking of carrying the hospital with you, it is all right sometimes, but I have gone into some places not knowing what it was, as Dr. Parker said, until I arrived. When I got there, I saw how things were moving. I would throw my coat down in the door, my vest in the middle of the floor, and the little fellow would be yelling at me by the time I got to the bed. I don't know what you are going to do with a hospital when you get there in a case like this.

Dr. O. R. Stewart: If you take a Sunday newspaper and put it on the bed, that makes a very good covering. In the city here especially, you can easily get those. Then we take a paper and fold it and lay it down under the bed, and when it becomes bloody, tear that paper off and fold it up and lay it out of your way. It keeps your bed clean. And, even if you were to get a clean sheet, it is liable to be dirty before you get started. If you take a Sunday newspaper, which costs a nickle, when you get to your patient, simply raise her up and pass it under her,

and you get a clean sheet, it makes no difference how long the labor lasts.

Dr. Thibault (Scott): I want to ask some of these gentlemen, with their peculiar experience in the country, what is the objection to buying a little sterile gauze?

Dr. McCarroll (in response): I just want to lay stress on one point in closing. In reference to what the doctor to my right said about waiting upon the little colored girl. He told us that he used two hours getting ready to deliver. This was ample time to provide boiling water in which plenty of sheets and towels or rags could have been sterilized. With these he could have covered his patient and protected his instruments until delivery could have been made. This would have provided a safe delivery so far as antisepsis is concerned. Of course the patient also should have the usual preparation. It is just such things as those that prompted me to write the paper. Because one patient might escape infection without preparation is no sign that the next one would do the same thing.

About the labor just in the act of terminating that Dr. Land spoke of will say that in all such instances where it is evident that it will soon be over, the physician can call for a clean cloth and support the perineum while the head is emerging without subjecting the woman to any danger from infection.

Nothing should be done except under the strictest antisepsis and asepsis any more than any other major surgery would be and then if anything goes wrong, we will at least feel better over the matter afterwards.

FRACTURE OF THE HUMERUS COMPLICATED WITH MUSCULO-SPIRAL PARALYSIS.*

By Oscar Gray, M. D.,
Little Rock.

During the past year I have had two cases of fracture of the humerus where there was a complication by reason of injury to the musculo-spiral nerve. While authorities on this subject report this complication to be a very common one, I have never had the misfortune to encounter one until this year. I can better describe these injuries by giving the case history of each.

Case One: A boy about ten years of age fell from a horse one evening after dark. He lived out in the country and my facilities for examination and treatment were limited, as we had to work by a torch. The distal end of the humerus was completely shattered and I could feel crepitation almost as far as the upper part of the lower third of the bone. It was necessary to put this fracture up with the arm extended and have the patient come to town in the next day or two for further treatment. At the time this fracture was reduced and placed in splints I never thought nor did it occur to me to examine the hand and see if he could use the flexors and extensors. Two days after the mother brought the boy to the office and after adjusting the splints I still overlooked to examine the hand as to paralysis of extensors. A week or ten days and she showed up again and then I could see what had happened. The hand remained limp without power to extend any of the fingers. The mother was not at all satisfied, neither was I, and I could see in my mind that boy going through life with a stiff elbow and a paralyzed hand. I consoled her the best I could and told her later on I would try and relieve the injury to the nerve by a small operation. It took hard work to have her agree to this, however. At the end of six weeks I moved him to the hospital and making a free incision exposed the nerve and broke up the callous bone tissue and closed the wound. A few days later he was instructed to work the fingers and with massage and constant working of the fingers at the end of a month extension was very good in all the fingers except one. An anesthetic was given the boy and forced flexion of the elbow was made. When I last saw him he was able to put his hand to his mouth and he had fair extension of all the fingers.

Case Two: This case is similar to the one above, only the fracture was almost over the musculo-spiral groove. I was on the lookout for this and discovered the trouble at the time the arm was set. Operation on this was made some four or five weeks later, same as the first case and resulted in good use of the fingers.

In reporting these cases I merely desire to call attention to the necessity of making a thorough examination of the mobility of the fingers before the fracture is reduced and the patient anesthetized. If this complication is found to begin with, a satisfactory explanation can always be made to the parents. I also think it wise to go a step further and tell the parents there is likely to be a paralysis later on and this also makes it easy for the surgeon in case of complications. These cases are a source of great worry to the surgeon and serve as a poor advertisement and afford a fine field for malpractice suits. I was fortunate in getting both cases in fair shape. I do not think the nerve in either case was severed but was greatly contused and later bound down by the formation of callous.

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

"WHEN SHOULD TONSILS BE REMOVED?"*

T. E. Fuller, M. D., F. A. C. S.
Texarkana.

The last word has not been spoken on the tonsil question. For that reason we should make frequent reviews of the subject in order to keep ourselves eorreetly oriented. This is all the more necessary when we consider that perhaps in no region of surgery are there more snap diagnoses made, and more ill advised operations performed.

While this is true, I have no sympathy with the article of MaeKenzie ealled, "The Massacre of the Tonsil", neither have I any sympathy for the view that the tonsils should be removed as a routine procedure as soon as the child reaches the age of four. However, if one must ride a hobby, the latter is undoubtedly the safer. "Better a thousand needless tonsillectomies than one death from endocarditis, or a chronie invalid from rheumatism."

There is between these extremes a rational middle ground, and it is there that we wish to stand. An incomplete examination in these cases is the cause of so many snap diagnoses. Here, as elsewhere, if important points are not to be overlooked, the examination should be made in a systematie way.

First, of course, is the history. In some cases the patient will state that he never had tonsillitis or sore throat, and yet further examination will reveal diseased tonsils. Others who have had no aeute attacks complain of a sense of fullness or soreness in the throat. It is important to ascertain whether there have been aeute attacks of tonsillitis in previous years, for such tonsils are frequently the seat of latent foci of infection.

In endocarditis and other metastatic infection where the tonsils are suspected, the systemie infection often develops simultaneously with, or immediately following an aeute tonsillitis. Acute colds often begin in the tonsils, and spread to the throat and nose. Of course, such a history is very suggestive.

We will inquire whether there are recurring aeute attacks, or whether there have been peri-tonsillar abscesses. In chronic infection, the patient will often express easeous masses having the eharacteristie odor. An inquiry as to the previous illness and the general state of the patient's health will frequently prove to be illuminating.

Following the history comes the examination of the tonsils themselves. In order to do this properly, we should have good illumination, preferably by a reflected light, a tongue depressor, some form of pillar retraetor, and one or two bent probes. We note the configuration of the parts, and the relation of the tonsils to the surrounding struetures. Pressure should be made on all parts of the gland to see whether or not pus or epithelial debris can be expressed. The crypts, espeeially the supra tonsillar, should be explored with a curved probe. If the tonsil is small or submerged, the anterior pillar should always be retracted. No examination is eomplete where this is not done. If the patient has not done so, he should be made to gag, during whieh time we note how high the tonsil extends into the vellum, and how completely it is eovered by plica. The relation of the latter structure to the tonsillar fossa frequently determines whether or not the gland should be removed.

It will be recalled that at birth the plica converts this fossa into what is almost a closed cavity, and that as the throat develops, the membranc retracts leaving the tonsil but slightly covered. No tonsil, which is largely invested by plica, can drain satisfaetorily. Even when the tonsil is entirely free, the plica may form a pocket above or in front of the gland, which is a source of eonstant irritation and infection. This is a frequently overlooked point, and the importanee of a thorough examination just here cannot be too strongly emphasized.

The mere fact that a tonsil is enlarged is no indication for its removal. A mild degree of hypertrophy is not abnormal. Frequently the only examination that is given a tonsil case is to look into the throat. If the tonsils are enlarged, the patient is told that they should be removed. If they do not projeet beyond the pillars they are said to be normal. If, because of their size, the tonsils cause obstruction to the breathing, interfere with the voice, or with the ventilation of the middle ear, they should be removed. It is evident that enlarged tonsils are often aeutely or chronieally inflamed, but it is to the tonsil normal, except for size, to which we are referring.

*Read before the Miller County Medical Society, February, 1918.

A very common type of diseased tonsils is where, in addition to being enlarged, the gland is congested and edematous and its surface is irregular and ragged. Crypt retention is common, and pressure will often express pus.

The tonsil most frequently overlooked, and the one that causes the greatest number of focal infection, is the small, submerged tonsil. Drainage is impossible, and these tonsils are very susceptible to acute infection. Here it is that one must retract the anterior pillar, and explore with a probe.

The tonsil stub which remains after a partial removal, or glands that have been cauterized frequently, are a very common source of infection, as their crypts are more or less sealed. Occasionally pockets of pus are found deep in the substance of tonsils which show no evidence of infection. In this type if a diagnosis is made, it must be by excluding all other foci of infection, and in order to do this the internist and laboratory worker must be called to our assistance.

Another suspicious type of tonsil, according to Shambaugh, is met with in adults, and is a very small fibrous tonsil. He describes it as follows: "The condition is found in individuals who, for many years, have been subject to many attacks of acute tonsillitis. I have several times removed tonsils, which were so shrunken as to represent scarcely more than a thin band of fibrous tissue from which the microscopic evidence of parenchyma had been largely eliminated. The patient is not aware that the recurring attacks of sore throat are really acute attacks of infection in the tonsils, and it is only by seeing the patient in the acute attack that the real character of the trouble can be diagnosed. I have seen a number of cases of chronic nephritis and chronic neuritis in patients who had for years suffered from this type of tonsillar trouble. Where each fresh attack was followed in a few days by an acute exacerbation of the chronic systemic infection. and where the enucleation of the small, insignificant looking fibrous tonsil resulted in a complete cessation of the acute attacks of sore throat, as well as the disappearance of the chronic systemic infection and a remarkable improvement of the patient's general health."

Where there are recurring attacks, or peritonsillar abscesses, the tonsils should be removed. All cases of benign tumors and cases of malignancy, where the growth is confined to the tonsils, should be subject to a tonsillectomy.

Certain cases of cervical adenitis constitute a positive indication for the removal of the tonsils.

It is to be remembered that a focus in the teeth vestibule, nose, scalp, naso-pharynx or ears may cause an enlargemennt of the cervical glands, and that all of these sources are to be investigated before deciding. One of the superior deep cervical glands, which lie under the anterior post of the sterno-mastoid muscle is so frequently enlarged in tonsillar infection that it is called by Wood "The Tonsillar Gland." This gland receives the lymphaties of the tonsils and is very constant. This fact will aid materially in deciding whether or not the tonsil is the source of infection. Cases where the infection comes from the tonsil are greatly benefited by a tonsillectomy. Many surgeons advise that in all cases where the glands of the neck are removed, the tonsils should be removed also.

The tonsils have long been recognized as the most important portal of entry in tuberculosis of the cervical glands. Wood believes that approximately ninety (90%) per cent of these cases show involvement of the tonsils.

Willis reported a series of 29 cases, in which 86% showed the tonsils to be involved.

Mitchell of Edinburgh reported a group of 100 cases of tuberculosis of the cervical glands. Of this number 38% of the tonsils contained tubercle bacilli. The second group comprised 100 cases of enlarged tonsils; only nine of these contained tubercle bacilli. Sixteen of the first group were of the bovine type and four of the second group.

We cannot too strongly urge the removal of the tonsils in all cases of tubercular adenitis.

There remains the question of systemic infection. To attempt to even enumerate the many conditions for which the tonsils are blamed would be impossible, besides it would lead us far into the field of speculation.

The subject of focal infection has been so constantly before the profession that no well informed physician doubts its importance, and high up in the list of organs producing these infections stand the tonsils. The relationship between them and the following diseases is too intimate to admit of doubt. First we place acute rheumatism and other

arthritides, including sub-acute and chronic, and arthritis deformans. Acute and chronic nephritis and chronic neuritis are frequently caused by tonsillar infection.

Charles H. Mayo believes the tonsil to be responsible for more than half the cases of goitre. Duodenal and gastric ulcer, and appendicitis have been found to have a definite relation to tonsillitis. There is little doubt as to the tonsil's responsibility in cases of chorea and endocarditis. Certain eye diseases, especially those of the uveal tract, are due to diseased tonsils. No doubt other conditions will be added to the list as the investigation proceeds, but the ones given above are important enough to command our most earnest attention.

There is no desire to leave the impression that the tonsil is the only possible source of infection in the above diseases. The teeth, gums, accessory sinuses, ears, genito-urinary and intestinal tracts should be excluded, but when that is done it will be found, as Osler says, that the tonsils are mycotic hot beds, which take first rank as a source of infection.

BIBLIOGRAPHY.

Shambaugh—Annals of Otology, Rhinology and Laryngology, September, 1913.

Shambaugh—Illinois Medical Journal, November, 1914.

Murphy—Southern Medical Journal, June, 1917.

Willis—Southern Medical Journal, September, 1914.

Barnes—The Tonsils, 1914.

Osler—System of Medicine, Volume 4.

SHORTEN THE WAR.

The sooner the irresistible might of this great Republic is organized and put into full action the sooner the war will end. Every dollar invested in Government securities works to shorten the war, to save the lives of American soldiers and sailors.

Buy Liberty Bonds.

LIBERTY AND LABOR.

The hope of labor lies in the opportunities for freedom; military domination, supervision, checks, bondage, lie in Prussian rule.

It is not through a German regime but through democracy that labor is to receive adequate recognition and its realization of its rightful place in the world.

LENDING THEIR BEST CUSTOMERS.

The proceeds of the Liberty Loan, including the greater part of that loaned to our Allies, are being spent for American products—the products of our factories, our farms, our mines, and other industries. In lending to the United States the people of the United States are lending to their best and largest customer and obtaining the safest investment in the world.

Buy Liberty Bonds.

THE MONEY COMES BACK.

The cycle of money invested in Liberty Bonds is short and complete. The people lend the money to the Government, the Government lends some to our Allies, and our Government and our Allies straightway spend the money, or the greater portion of it, among the people of the United States. In some instances the money paid in by wage earners on one installment of Liberty Bonds is paid by the Government to their employers, and by their employers paid back to them in the way of wages before the next Bond installment is due.

Buy Liberty Bonds.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

THE ANNUAL MEETING.

Jonesboro is the place, and May 7, 8 and 9 the dates for the coming Annual Convention of the Arkansas Medical Society. Among the distinguished visitors will be Rupert Blue, Surgeon General United States Public Health Service, Washington, D. C., who has accepted an invitation to address a public meeting during the meeting.

There is no need to plead war conditions as an excuse for not attending. Indeed war conditions afford an additional reason why you should not fail to attend. The profession has already suffered heavy drafts of its members both in the regular service and the Reserve Corps and it will suffer more, therefore for those who are left behind there will be more work to do and they must be up to the minute in modern scientific development. This being the case one should neglect no opportunity of getting posted and certainly no better opportunity is afforded than a large gathering such as this.

For example:

Could you, at home, get the benefits of the knowledge and experience in modern sanitation and disease prevention, such knowledge of what the Government experts are doing, as you are likely to obtain from the address of Dr. Blue?

But that is only one example. There will be other distinguished members of the profession there, both home and imported talent, who will speak. It is from such addresses, the exchange of experience and ideas, and renewal of old acquaintanceships that the meetings derive their value. The medical profession is one in which there is absolutely no end to the course of study. The graduated student, the fledgling physician, has not completed his studies—he has just begun. If he thinks his studies are ended when he leaves college he should adopt some other profession—he will never shine in medical annals. Should a physician attain the reputed age of the late Dr. Parr, of blessed memory, or even of Methuselah himself, he could still be learning something till the last years of his life. Since medicine is not an exact science and methods of treatment and remedies employed change from generation to generation, the practitioner must keep up with the profession or be relegated to the old fogy class.

Therefore let no press of business, no private affairs, no "war conditions" keep you at home when you should do everything to help make the meeting a success. There is another angle to this also. The business men of Jonesboro and the citizens generally, offer the convention the hospitality of the city. It would not be courteous to let the attendance dwindle. You need the convention and the convention needs you. Adopt this as your slogan and BE THERE.

A GOOD DOCTOR AND THE GOOD CITIZEN.

Every doctor is not a good citizen in the true sense of the word . That a man keep the commandments, that he live a decent, orderly life, that he keep out of jail, are not all the component parts that go to make up a truly good citizen. A man may do all these things and, except for his example in leading a decent life, he may be worth nothing to the community.

The really useful citizen feels interested in all those things which affect his community. He need take no active part in politics, further than to vote. He need not "shy his hat into the ring" seeking office, but he should actively take part in all civic matters favorably affecting his community and as active a part in opposition to all things unfavorably affecting his community. A doctor is a man and a citizen. Being a man and a citizen he should not hold himself aloof merely because he is a doctor—as unfortunately many do.

These remarks are prompted by the pleasure in noting that when an influential delegation of citizens went to Ebert's Field from England in an effort to secure for that town the location of a landing place, in which they were successful, five physicians of England headed the list as published in a leading State paper.

SOME OF WAR'S BLESSINGS.

Pliny said there was not a book in the world so bad but that some good could be learned from it. "Sweet are the uses of adversity," said an ancient sage. It is so in everything. Nothing is wholly bad without a benefit, although perhaps hidden from mortal view at the time. As the hymnist has it "The bud may have a bitter taste but sweet will be the flower." Pope's philosophy was that "All that is, is right" and Rousseau's maxim, ridiculed so unmercifully by Voltaire in "Candide" was that "This is the best of all possible worlds."

Therefore, while we may think the awful war an unmixed evil we will find good in it, do we but look below the surface. The very evident good, easily foreseen, after Germany is defeated, will be the triumph of democracy and the downfall of autocracy. But some of the good is here now. We don't have to wait for the end of the war to experience it. It is manifested already in the sacrifices people are called on to make. Our wheatless and meatless and porkless days and wheatless and meatless meals besides tend to cure us as a people of overeating, of eating too much meat.

We are learning economy slowly perhaps, but we are learning. We are learning more about sanitation, especially in the cantonment cities, and what is still better than mere learning, sanitary regulations are being enforced as never before.

Every medal has its reverse and obverse side. There are two sides of war also. Look for the side which is not exposed to us daily in the news of battle, slaughter and U-boat tragedies.

THE SANITARY DANGERS FROM DOMESTIC PETS.

A report on an epidemic of virulent smallpox in one of the southwestern States, submitted to the Surgeon General of the Public Health Service by one of the officers of that corps, sets forth with renewed emphasis the role that domestic pets may play in the transmission of disease, especially among children. The instance cited was that of a fatal case of smallpox in an infant in arms. The nearest case of the disease was in a house a block or so distant, and although the two families had no social relations, this apparently did not deter a dog belonging to the infected family from dividing his attention impartially between the two homes, eating at one place and sleeping at the other.

In no other way could the source of the infection of the baby be explained, than that the dog fondled by the children of the smallpox family carried the virus of the disease to the neighbor's baby. Similar instances have been noted before in connection with smallpox transmission, and cats and dogs both have been incriminated as carriers of plague infected fleas, cases of bubonic plague so contracted having been observed by Public Health Service officers working in recent

plague epidemics. The same household pets also have been charged in certain instances with the responsibility of carrying infection of diphtheria, scarlet fever and other communicable diseases of children, as well as various intestinal parasites.

A disease that annually causes more than 100 deaths in this country is rabies, and the role of domestic animals in spreading this disease is definitely proven, speculation or circumstantial evidence being discarded.

Altogether, therefore, it is perfectly evident that the citizen who keeps domestic pets maintains at the same time a very potential source of danger; a sanitary menace to his own household and to that of his neighbor. While this aspect of the subject applies year in and year out, it may well behoove the city dweller in these times of urgent demand for food conservation to seriously take council with himself as to whether he is justified in continuing to keep his dog or his cat, both of which are casual sources of mental annoyance to neighbors, as well as agents for graver potentialities.

Editorial Clippings.

THE FAMILY DOCTOR.

There has been considerable speculation in recent years as to the probable future of the family doctor. This thought is no doubt emphasized because so many medical men are limiting themselves to some specialty in their practice, and to the tremendous increase in our knowledge in every department of medicine. In a manner it reminds one of the prediction that the horse would become extinct through the development of the automobile; and though ultimately this prediction may become true, it is slow of realization. Horses are nearly as numerous today as before the advent of the automobile and of greater value. While the family doctor may seem somewhat old-fashioned, he will not be relegated to oblivion in our generation or time. The human mind is slow to discard an institution that has been fraught with so much benefit for so many generations. Through these years the family doctor has endeared himself to the hearts of the people. All manner of eulogy has been bestowed upon him. He has been friend, counsellor and help in times of stress and trouble; always considerate of others even to the neglect of his own health and fortune. Always giving and carrying in his great heart the sorrows, disappointments and joys of his little community. In return he has been thrice blest in the respect, love and esteem of all his patients.

To the good old family doctor, of sterling character, who is an honor to the community and to whom patients look with confidence and hope we extend the right hand of fellowship.

Long may you live and prosper.—Charlotte Medical Journal.

A CALL FOR FIVE THOUSAND MORE MEDICAL OFFICERS.*

If there is any one lesson that this war has taught the world it is that of preparedness. If it were not that it stands for a principle which is axiomatic, the reiteration of the word "preparedness" would become monotonous. As it is, the tremendous importance of the principle undoubtedly has prompted the appeal of the Surgeon-General, which appears on another page, for five thousand more volunteers for the Medical Reserve Corps. At present there are approximately 18,300 members in the Corps and in addition, about 1,500 have been offered commissions who have not yet accepted. Thus there is a sufficient number for present needs and for the immediate future. But it is the ultimate future—it is what may develop in four, in eight, in twelve, in eighteen months for which preparations must be made. It will be noticed that the Surgeon-General calls for five thousand more volunteers for the Medical Reserve Corps NOW. The call is made on the organized profession. It is up to us, to the medical profession of the United States, to respond to this call—the call of our government, of our country. The Association is preparing, and has about ready for publication, a survey of the response the medical profession has already made. This survey will show in what States, in what counties and in what communities the profession has shown its patriotism and its self-sacrificing spirit in responding, and in which communities it has lagged behind. THE ORGANIZED PROFESSION WILL RESPOND TO THE CALL OF THE SURGEON-GENERAL! So far as possible the response must be made with the consideration of the actual needs of the public—

*On request an application blank for the Medical Reserve Corps will be sent by the Journal of the Arkansas Medical Society, Little Rock.

not as expressed by the individual physician himself, but by the profession as a whole in his community, county and State. Preparations are already in the making for conducting the "drive" for this new increment of five thousand physicians. Let every reader ask himself the question: Is it my duty to volunteer? And then let him answer it honestly!—Jour. A. M. A.

Abstracts.

THE BRITISH ZONE OF THE ADVANCE.

George de Tarnowsky, Chicago, at the front in France (Journal A. M. A., March 16, 1918), describes conditions as observed by him in the British zone of advance on the western front. The British have maintained a comparatively short front, difficult to hold and correspondingly more difficult to advance in. The continuous fighting has increased the distance between the firing lines and the regimental aid posts, and lengthened the elapsed time between the wound reception and treatment. The evacuation hospitals or casualty clearing stations are under more or less continuous bombardment, and have frequently had to be moved from place to place. Primary closure of wounds, which is almost an axiom in the French army, is still in the experimental stage on the British front. Tarnowsky describes the topography of the land with its ruined villages and towns, and the almost universal shell holes, filled with mud and water, which render "duck board" walks necessary to transport the patients across the desolated tracts. He says one cannot help feeling admiration for the bulldog tenacity, courage and spirit of self-sacrifice which have enabled the British to hold on to the difficult situation for four years and to advance their lines in the face of such gigantic topographic and climatic difficulties. The regimental aid posts are first described. They are situated about a thousand yards back of the trenches. The relay posts are about a thousand yards apart. Two or more relay posts are maintained between the regimental aid station and the advanced dressing station. The advanced dressing station represents a divisional field ambulance occupying a semi-permanent post, 5,000 yards behind the firing line, and from it a narrow gage railway could bring the wounded to the corps main dressing station. The advanced dressing station described is in the ruins of a chateau, which had been protected by corrugated iron roofing, and four layers of sand bags. In it, however, emergency operations could be performed only during periods of comparative calm. Situated 1,000 yards behind the advanced dressing station was a collection post for the slightly wounded and sick. The main corps dressing station, about 8,000 yards from the extreme front, represented the first semi-permanent field ambulance where emergency operations could be performed amid proper surroundings, though as yet no advanced surgery was performed, but de Tarnowsky received the impression that it was being considered. The British corps rest stations correspond to our hospitals for the slightly wounded. Trench foot prophylaxis stations receive the greatest single percentage of casualties. The present system of prophylaxis and active treatment has given the most satisfaction, though the ideal has not yet been reached. The regulations for the prevention of trench foot are elaborate, and are detailed in full, but they cannot always be carried out by the soldiers. De Tarnowsky describes the delousing stations where the men's clothes are cleaned and the vermin destroyed. It is well nigh impossible to live in the zone of the advance without becoming lousy, and this is not surprising under the conditions. The British casualty clearing stations are placed considerably more to the rear than are those of the French, owing to the exposure to bombardment and the constant harrassing warfare being carried out on the British front. Many of them also are still housed in tents, and the life of a tent, thus used, is about four months according to British experience. The article is interesting and instructive, and gives a rather adequate idea of the difficulties and hardships encountered.

Personals and News Items.

Dr. S. G. Hamm has moved from Point Peter to Eula.

Dr. Thos. C. Guthrie has moved from Jessup to Carlisle.

Dr. E. M. Gray has moved from Evening shade to Lavaca.

Dr. M. C. Richardson of Datto visited in Little Rock and Stuttgart this month.

Dr. and Mrs. H. H. Rightor of Helena visited in Little Rock this month.

Dr. W. T. Lowe of Pine Bluff is with the American Red Cross "Somewhere in France."

Dr. J. L. Lynn of Hazen is attending the medical and surgical clinics in New Orleans.

Dr. Chas. W. Head of Windsor, Mo., visited his son at Camp Pike this month.

Dr. C. S. Pettus, superintendent of the Pulaski County Hospital, has returned from visiting his father at Florence, Ala., and his old home at Morton, Miss.

Our advertising pages are your property as a member of the Arkansas Medical Society. Advertisers will pay for space in proportion as you buy from them, and thus make the space valuable to them.

Physicians visiting in Little Rock during the past month include: Wm. Breathwit, Pine Bluff; C. E. Dungan, Augusta; T. B. Bradford, Cotton Plant; Geo. S. Brown, Conway; O. E. Jones, Newport; Don Smith, Hope; L. R. Ellis, and C. T. Drennen, Hot Sprnigs.

At a recent meeting of the Jackson County Medical Society the following officers were elected: President, O. E. Jones; vice president, Ira Erwin; secretary-treasurer, E. L. Watson; censor, G. A. Causey; delegate to the State Society, Ira Erwin.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas physicians recommended for commissions in the Medical Reserve Corps, published in the last seven issues, the Surgeon General reports:

Julius Sheppard Moore, Arkadelphia, Captain.
Oscar Barksdale, Bassett, First Lieutenant.
Frank L. McCahey, Camp Pike, First Lieutenant.
Sterling Price Bond, Little Rock, First Lieutenant.
John Lewis Smiley, Siloam Springs, First Lieut.
Ernest Darnall, Widener, First Lieutenant.

COMMITTEE NAMED TO GOVERN "HOME PHYSICIAN" VOLUNTEERS.

The Council of National Defense has authorized the following statement:

Dr. Franklin Martin, chairman of the general medical board of the Council of National Defense, has appointed the following committee of the general medical board which will constitute a central governing board to handle the general administration of the Volunteer Medical Service Corps: Dr. Edward P. Davis, Philadelphia, president; Dr. Henry H. Sherk, Pasadena, vice president; Dr. John D. McLean, Philadelphia, acting secretary; Dr. Edward H. Bradford, Boston; Dr. Truman W. Brophy, Chicago; Dr. Duncan Eve, Nashville; and Dr. William Duffield Robinson, Philadelphia. Dr. Martin and Dr. F. F. Simpson, vice chairman of the general medical board, are members ex-officio of the new central governing board.

TO ENLIST ALL CIVILIAN PHYSICIANS.

The Volunteer Medical Service Corps aims to enlist in the general war-winning program all reputable civilian physicians who are ineligible to the Medical Officers' Reserve Corps and who can not serve in camp, field or base hospital because they are over 55, have slight physical infirmity, or are needed for public or institutional service.

It will be an organization of doctors at home "to do something when there is something to do" in response to calls from the Surgeon Generals of the Army, Navy, or Public Health Service, General Medical Board, Council of National Defense, or other duly authorized departments or associations.

APPLICATIONS FOR MEMBERSHIP.

Applications for membership may be sent to the Council of National Defense, Eighteenth and D Streets, Washington, D. C.—Official Bulletin.

Correspondence.

TREASURY DEPARTMENT.

OFFICE OF HYGIENIC LABORATORY,
UNITED STATES PUBLIC HEALTH SERVICE,

Washington, April 5, 1918.

The Editor, Journal of the Arkansas Medical Society, Boyle Bldg., Little Rock, Ark.

DEAR SIR: In view of the reports in current medical literature of untoward results from the use of arsphenamine and neoarsphenamine, I have to request that you give publicity to the statement that it is requested that samples of any lots of these arsenicals which have shown undue toxicity be forwarded to the Hygienic Laboratory for examination.

In sending these samples it should be ascertained that the lot number is the same as that

of the ampoules used on the patients. The samples sent should, if possible, be accompanied by a brief note stating the approximate body weight and age of the patient, the dose and dilution of the drug given, the symptoms and result; that is, whether fatal or not.

Respectfully,

S. W. McCoy, *Director.*

Program.

FORTY-SECOND ANNUAL SESSION
OF THE
ARKANSAS MEDICAL SOCIETY
JONESBORO, MAY 7, 8, 9, 1918

Headquarters, Y. M. C. A. Building

OFFICERS.

President—Wm. Breathwit, Pine Bluff.
First Vice President—H. A. Stroud, Jonesboro.
Second Vice President—E. F. Ellis, Fayetteville.
Third Vice President—W. W. York, Ashdown.
Secretary—C. P. Meriwether, Little Rock.
Treasurer—W. R. Bathurst, Little Rock.

Councilors and Councilor Districts.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties. Councilor, J. H. Stidham, Hoxie. Term of office expires 1919.

Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White Counties. Councilor, J. C. Cleveland, Bald Knob. Term of office expires 1918.

Third Councilor District—Arkansas, Cross, Lee Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff Counties. Councilor, H. H. Rightor, Helena. Term of office expires 1919.

Fourth Councilor District—Ashley, Bradley, Chicot, Jefferson and Lincoln Counties. Councilor, J. M. Lemons, Pine Bluff. Term of office expires 1918.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union Counties. Councilor, Foster Jarrell, Huttig. Term of office expires 1919.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier Counties. Councilor, J. H. Weaver, Hope. Term of office expires 1918.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant Counties. Councilor, J. E. Jones, Sheridan. Term of office expires 1919.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope Counties. Councilor, Earle H. Hunt, Clarksville. Term of office expires 1918.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren Counties. Councilor, Leonidas Kirby, Harrison. Term of office expires 1919.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington Counties. Councilor, J. T. Clegg, chairman, Siloam Springs. Term of office expires 1918.

Delegates to American Medical Association.

W. T. Wootton, Hot Spring; C. P. Meriwether, Little Rock.

COMMITTEES.

Scientific Program.

H. A. Stroud, Jonesboro, chairman.
Thad Cothern, Jonesboro.
C. M. Lutterloh, Jonesboro.
C. P. Meriwether, Little Rock (ex-officio).

Medical Legislation.

R. C. Dorr, Batesville, chairman.
W. A. Snodgrass, Little Rock.
E. H. Hunt, Clarksville.

Board of Visitors to the Medical Department of the University of Arkansas.

E. E. Barlow, Dermott, chairman.
B. D. Luck, Pine Bluff.
M. L. Norwood, Lockesburg.

Necrology.

R. H. T. Mann, Texarkana, chairman.
A. C. Jordan, Pine Bluff.
J. L. Butler, Sheridan.

Health and Public Instruction.

C. W. Garrison, Little Rock, chairman.
L. R. Ellis, Hot Springs.
J. S. Rinehart, Camden.

Sanitation and Public Hygiene.

E. P. McGehee, Lake Village, chairman.
J. C. Wallis, Arkadelphia.
J. M. Lemons, Pine Bluff.

Cancer Research.

Robt. Caldwell, Little Rock, chairman.
T. F. Kittrell, Texarkana.
M. D. Ogden, Little Rock

First Aid.

J. A. Foltz, Fort Smith, chairman.
H. H. Henry, Eagle Mills.
A. Isom, Dumas.

Infant Welfare

H. H. Niehuss, El Dorado, chairman.
F. C. Mahoney, El Dorado.
Morgan Smith, Little Rock.
O. E. Jones, Newport.
W. T. Lowe, Pine Bluff.

History of the Arkansas Medical Society.

L. P. Gibson, Little Rock, chairman.
C. P. Meriwether, Little Rock.
Wm. R. Bathurst, Little Rock.

Medical Expert Testimony.

L. P. Gibson, Little Rock, chairman.
M. D. Ogden, Little Rock.
St. Cloud Cooper, Fort Smith.
C. H. Cargile, Bentonville.
G. S. Brown, Conway.

Prevention of Typhoid Fever and Malaria.

M. L. Norwood, Lockesburg, chairman.
Don Smith, Hope.
H. Thibault, Scott.
O. L. Williamson, Marianna.

Workmen's Compensation and Social Insurance.

Wm. Breathwit, Pine Bluff, chairman.
W. T. Wootton, Hot Springs.
H. H. Rightor, Helena.
W. F. Smith, Little Rock.
L. Kirby, Harrison.

ANNOUNCEMENTS.

The House of Delegates, and the Scientific Sessions, the Registration Booth, and the Commercial Exhibits will be found in the lobby of the Y. M. C. A. building.

ENTERTAINMENTS.

TUESDAY, 8:00 P. M.

City Auditorium.

Informal Reception—Dr. J. L. Burns, Chairman.
Music.
Patriotic Songs.
Recitations.
Dancing.

NOTICE.

All papers read at this meeting are the property of the Arkansas Medical Society, and, as soon as read, should be handed to the secretary.

PROPOSED AMENDMENTS TO BE VOTED ON AT THIS MEETING

That Section 2, Chapter 4, be amended as follows: After the word "thereof" in the fifth line to read as follows: "provided that its annual report and assessments are in the hands of the secretary 30 days prior to the annual meeting. Each component society, however, regardless of its number of members, which has complied with this section, is entitled to one delegate."

Section 3, Chapter 7, be amended as follows: Omit the last ten words of the section.

Section 8, Chapter 9, be amended as follows: After the words "into whose jurisdiction he moves" add "and this request must be made within twelve months."

Section 5, Chapter 9, be amended as follows: Omit the following words beginning in line 6: "who is a graduate of a reputable medical college."

Section 3, Chapter 6, be amended as follows. The Treasurer shall give bond in the sum of $3,000.00.

Section 4 shall be amended as follows: The secretary shall give bond in the sum of $3,000.00.

Section 3, Chapter 5, shall be amended as follows: Change the word "morning" to "afternoon."

COMMERCIAL EXHIBIT.

The commercial exhibit promises to be of a high grade and will be on the main floor, Y. M. C. A. building.

HOUSE OF DELEGATES.

The House of Delegates will be called to order Tuesday, May 7, 1918, at 9:00 a. m., in the Y. M. C. A. building.

Wm. Breathwit, President.

C. P. Meriwether, Secretary.

Calling meeting to order by the President.

Invocation—Rev. Wm. Sherman, Pastor First Methodist Church.

Address of Welcome to the House of Delegates—W. W. Jackson, President Craighead County Medical Society.

Appointment of Committee on Credentials.

Roll call.

Reading of minutes.

Appointment of Reference Committees.

President's Address to House of Delegates.

Reports of Committees.

Report of the Chairman of Council.

Report of Delegates to the American Medical Association.

Secretary's Report.

Treasurer's Report.

Reading of Communications.

Memorials and Resolutions.

Selection of the Nominating Committee.

Selection for the State Board of Medical Examiners.

Miscellaneous Business.

Adjournment subject to the call of the president.

GENERAL SESSION.

TUESDAY, MAY 7, 1918.

Y. M. C. A. Building.

2:00 p. m.

Called to Order by Wm. Breathwit, President.

Invocation—Rev. Wm. Sherman, Pastor First Methodist Church.

Address of Welcome—By Mayor Gordon Frierson.

Address of Welcome—By W. W. Jackson, President Craighead County Medical Society.

Response to the Address of Welcome on behalf of the Arkansas Medical Society—By G. A. Warren, Black Rock.

President's Address—Wm. Breathwit, Pine Bluff.

SCIENTIFIC SESSION.

(The scientific session will begin immediately after the adjournment of the general session.)

(During the discussion of papers, speakers will please step near the president's desk, so that the audience and the stenographer may plainly hear their remarks.)

"The Seriousness of Obstetrics and Some of the Pitfalls to Avoid"—J. Philip Lunt, Leonard.
Discussion opened by R. E. Bradsher, Marmaduke.

"Toxemia of Pregnancy"—J. T. Altman, Jonesboro.
Discussion opened by H. R. McCarroll, Walnut Ridge.

"Extra Uterine Pregnancy"—Report of case, L. L. Purifoy, El Dorado.
Discussion opened by L. E. Willis, Newport.

"Mental Health"—Thomas Douglass, Ozark.

WEDNESDAY, MAY 8, 1918, 9:00 A. M.

Invocation—By Rev. Gilbert Jones, Pastor First Christian Church.

"The Opportunities Offered to Arkansas Young Men by Our State Medical School"—A. R. Stover, Little Rock.

"Treatment of Burns With Paraffine Mixtures"—E. Hodges, Branch.
Discussion opened by J. B. Roe, Newark.

Title to be announced—Robert Caldwell, Little Rock.

"Colonic Membrane and Its Significance to the Surgeon"—J. P. Runyan, Little Rock.
Discussion opened by A. C. Jordan, Pine Bluff.

"Herniotomy"—John A. Lightfoot, Texarkana.
Discussion opened by Henry Dickson, Paragould.

Title not announced—E. E. Barlow, Dermott.

"The Use of Copper Sulphate as an Aseptic"—C. S. Pettus, Little Rock.

WEDNESDAY, 2:00 P. M.

"What Our State is Doing in Sanitation and Preventable Diseases"—C. W. Garrison, Little Rock.

"Is it Advisable to Quarantine Children Against Measles in Civil Practice?"—C. J. March, Fordyce.
Discussion opened by Lieut. Col. C. C. Pierce.

"Sanitation of Our County Schools as a Measure of Reclaiming and Educating Our County Citizenship"—O. L. Williamson, Marianna.

"The House Fly and What Its Destruction Means to the Conservation of Health"—O. Howerton, Osceola.

"The Baneful Consequences of Unclean Teeth and Mouth"—L. S. Johnson, D. D. S., Jonesboro.
Discussion opened by H. J. Green, D. D. S., Paragould.

"U. S. Public Health Service Around Our Cantonments"—Lt. Col. C. C. Pierce, Little Rock.

"Some Experiences as Examiner for Local Exemption Board"—Carle Bentley, Little Rock.

"Problems Confronting Public Health Service"—Thomas J. Wood, Evening Shade.

PUBLIC SESSION.

WEDNESDAY, 8:00 P. M.

City Auditorium.

Dr. C. W. Garrison, State Health Officer, Presiding.

Introductory Talk—Mr. Virgil Pettie, President Arkansas Bankers' Association.

Address—Rupert Blue, Surgeon General, United States Public Health Service, Washington, D. C.

Address—Hon. T. H. Caraway.

THURSDAY, 9:00 A. M.

Invocation—Rev. J. R. Hobbs, Pastor First Baptist Church.

"The Role of the Appendix in the Acute Abdomen"—J. T. Palmer, Pine Bluff.

"Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis"—B. C. English, Booneville.

"The Danger of Delay When Submucous Resection of the Nasal System is Indicated—Technic Involved"—L. H. Lanier, Texarkana.

"Hysterical Blindness"—H. H. Rightor, Helena.
Discussion opened by Robt. Caldwell, Little Rock.

"Report of Two Cases Intussusception, Operation, Recovery"—E. F. Ellis, Fayetteville.
Discussion opened by Chas. H. Cargile, Bentonville.

"Some Observations on the Diagnosis and Treatment of Epidemic Cerebro-Spinal Meningitis"—Morgan Smith, Little Rock.

"Avoided Subjects"—Chas. H. Cargile, Bentonville.

THURSDAY, 2:00 P. M.

"The Rule to be Applied in Carrying Out the Ethics of Our Profession"—R. C. Dorr, Batesville.
Discussion opened by James H. Lenow, Little Rock, and R. J. Haley, Paragould.

"Conservation of Vision"—H. Moulton, Fort Smith.
Discussion opened by Wm. Breathwit, Pine Bluff.

"Focal Infection as a C use of Eye Diseases"—R. H. T. Mann, Texarkana.
Discussion opened by Robt. Caldwell, Little Rock.

"Whooping Cough"—H. H. Niehuss, El Dorado.
Discussion opened by J. T. Clegg, Siloam Springs, and C. W. Garrison, Little Rock.

"Preventive Blindness"—W. T. McCurry, Little Rock.

New and Nonofficial Remedies.

Halazone-Monsanto.—A brand of halazone complying with the New and Nonofficial Remedies standards. Halazone is parasulphonedichloramidobenzoic acid. The Monsanto Chemical Company, St. Louis, Mo.

Typhoid Vaccine, Prophylactic.—A vaccine made from killed Bacillus typhosus. The vaccine is used for the prevention of typhoid fever, for which purpose typhoid vaccines are of recognized utility. Marketed in different sized containers, containing 500 million and 1,000 million killed Bacillus typhosus in one c. c. Eli Lilly and Company, Indianapolis.

Typhoid Vaccine, Therapeutic.—A vaccine made from killed Bacillus typhosus. The vaccine is proposed for the treatment of typhoid carriers and as a concomitant measure to the usual routine of typhoid therapy. Marketed in different sized containers, con-

taining 100, 250, 500 and 1,000 million killed Bacillus typhosus in one c. c. Eli Lilly and Company, Indianapolis.

Bulgarian Bacillus Tablets—Mulford.—Tablets containing a practically pure culture of Bacillus bulgaricus. Used in the prevention and treatment of conditions due to intestinal putrefaction. Marketed in vials containing fifty tablets. An expiration date is stamped upon the label. H. K. Mulford Company, Philadelphia (Jour. A. M. A., March 2, 1918, p. 623).

Procaine, Abbott—A brand of procaine complying with the New and Nonofficial Remedies standards. Procaine was first introduced as "novocaine." Chemically it is the monohydrochlorid of para-aminobenzoyldiethyl-amino-ethanol. It is used as a local anesthetic as a substitute for cocaine. The Abbott Laboratories (Jour. A. M. A., March 16, 1918, p. 779).

Arsenobenzol (Dermatologic Research Laboratories), 1 Gm. Ampules.—Each ampule contains one Gm. arsenobenzol (Dermatologic Research Laboratories), a brand of arsphenamine complying with the New and Nonofficial Remedies standards. These ampules are prepared for use in hospitals in divided doses. Dermatological Research Laboratories, Philadelphia Polyclinic, Philadelphia.

Typhoid Mixed Vaccine (Typho-Bacterin Mixed).—A vaccine made from killed alpha and beta Bacillus paratyphosus and Bacillus typhosus. The vaccine is used for the immunization against typhoid and paratyphoid fevers and in the treatment of mixed infections of the typhoid bacillus and the paratyphoid bacilli. Marketed in different sized containers, containing 250 million alpha and beta Bacillus paratyphosus and 1,000 million Bacillus typhosus in one c. c., and 500 million alpha and beta Bacillus paratyphosus and 1,000 million Bacillus typhosus in one c. c. Eli Lilly and Company, Indianapolis.

Propaganda for Reform.

Sodium Cyanid.—Loevenhart, Lorenz, Martin and Malone report experiments looking toward the use of sodium cyanid, administered intravenously, as a means of stimulating respiration in threatened collapse from drowning, etc. (Jour. A. M. A., March 9, 1918, p. 692.)

Hypophosphites for the Army.—The purchasing department of the medical department of the U. S. Army asks for bids on three tons, in one-pound bottles, of the "Compound Syrup of Hypophosphites." These six thousand bottles of a relic of past generations must be paid for and are to occupy valuable freight space in shipping to various army posts. (Jour. A. M. A., March 16, 1918, p. 783).

Melubrin.—Chemically, melubrin is closely related to anti-pyrine. It acts as an antipyretic and analgesic and is said to be useful in sciatica, neuralgias and in febrile affections, and as an antipyretic in febrile affections. In Sollman's Pharmacology, in a discussion of coal-tar antipyretics, it is stated that practical experience has shown that acetphenetidin, acetanilid and antipyrine are the most useful representatives of the group, and that all the others may well be spared (Jour. A. M. A., March 23, 1918, p. 874).

Compatibility of Phenolphthlein.—It is better not to combine several laxatives, but those who believe in doing this may combine phenolphthalein with drugs that can properly be prescribed in powders or pills as, for instance, calomel. Since phenolphthalein and calomel are both tasteless, they may be prescribed in powders or enclosed dry in capsule, cachet or wafer, the amount of each ingredient being estimated according to the susceptibility of each patient (Jour. A. M. A., March 30, 1918, p. 950).

Thyroid Hyperplasia and Iodin.—The evidence indicates that simple goiter is associated with a deficiency of iodin in the thyroid gland and that goiter formation may be prevented by iodin administration. Marine and Kimball have undertaken a study of goiter prevalence and its prevention by administration of iodin at the request of the Committee on Therapeutic Research of the Council on Pharmacy and Chemistry. In a complete census of the condition of the thyroid gland in girls from the fifth to the twelfth grades of a school population in a large community at the southern edge of the Great Lakes goiter district, they found that 2,184 or 56 per cent., had enlarged thyroids, 13 per cent. having well defined persistent thyroglossal stalks (Jour. A. M. A., March 23, 1918, p. 848).

Barbital (Veronal) Classed as a Poison by England.—Because of frequent reports of accidents and habit formation, the Privy Council of Great Britain has classified as poisons

"diethylbarbituric acid, and other alkyl, aryl, or metallic derivatives of barbituric acid, whether described as veronal, proponal, medinal, or by any other trade name, mark or designation, and all poisonous urethanes and ureides." As a result veronal will seldom be dispensed except on a physician's order, and that a record of such sales will be kept in the pharmacist's poison book. (The official name for diethyl-barbituric acid of the British Pharmacopoeia is barbitone; in the United States the official designation for this product is barbital.) (Jour. A. M. A., March 30, 1918, p. 953).

Medeol Suppositories.—The Council on Pharmacy and Chemistry reports that Medeol Suppositories appear to be an imitation of Anusol Suppositories, which in 1907 were found inadmissable to New and Nonofficial Remedies. "Anusol" was formerly said to be bismuth iodoresorcinsulphonate, but after publication of an analysis in the A. M. A. Chemical Laboratory in 1909, this claim was abandoned and today Anusol Suppositories are said to contain unstated amounts of the indefinite "bismuth oxyiodid and resorcinsulphonate." "Medeol" is said to be "resorcinated iodo bismuth", but no information is vouchsafed as to the character or composition of the ingredient. As the composition of the two preparations are similar, so are also the therapeutic claims. The Council declared Medeol Suppositories inadmissible to New and Nonofficial Remedies because their composition is secret, because unwarranted therapeutic claims are made for them, because the name is objectionable, and because the combination is unscientific (Jour. A. M. A., March 9, 1918, p. 719).

Some Misbranded Nostrums.—"Notices of Judgment," reporting prosecutions for misbranding under the Federal Food and Drugs Act, have been issued for the following: Hayseen's Sure Goitre Cure Balsam, a solution of potassium iodid in water, sugar and alcohol. Hayseen's Sure Goitre Ointment, containing petrolatum and potassium iodid. MacDonald's Atlas Compound Famous Specific No. 18, consisting essentially of sodium sulphate, sodium bicarbonate, a laxative plant drug (apparently aloes), ginger, a small amount of phosphate, a trace of alkaloid and talc. Faucine, said to be a "warranted remedy" for piles, diarrhea, dyspepsia, scratches of horses and "good" for female complaints, "hog cholera" and other conditions. Cantrell's Magic Troche, containing a little ipecac and claimed to cure catarrh, asthma and diphtheria. Benn Capsules contain strychnin, arsenic, iron and water soluble sulphates, and are sold as a cure for dyspepsia, backache, headache, leukorrhea, falling of the womb, etc. Collin's Voltaic Electric Plasters, claimed to relieve pain and inflammation of the kidneys, of value in fever and ague and "good" for simple bone fracture, and would relieve many cases of bronchitis and asthma, female weakness, etc. Mother Noble's Healing Syrup, containing vegetable cathartic drugs, iron chlorid, Epsom salts and sand. Stuart Buchu and Juniper Compound, containing no appreciable amounts of buchu and juniper (Jour. A. M. A., March 9, 1918, p. 718).

Shotgun Nostrums.—As the soldier of today uses a rifle instead of a blunderbuss, so the modern physician uses single drugs rather than shotgun mixtures. There are many types of "shotgun" nostrums. Some are dangerous, as in the case of "Bromidia"; some are preposterous therapeutic monstrosities which excite the contempt of educated physicians, as in the case of "Tongaline"; some are merely useless mixtures of well-known drugs sold under grotesquely exaggerated claims, as in the case of "Peacock's Bromides." It is impossible to determine from the published formulas just how much hydrated chloral and potassium bromide Bromidia contains, but it is probable that there are about 15 grains of each of these two drugs to the fluidrachm and variable amounts of Indica cannabis and a small amount of either extract or tincture of hyoscyamus. Bromidia is a distinctly dangerous mixture for indiscriminate use, particularly so if the advertising creates the impression that in it the chloral hydrate has been deprived of its untoward effects. Tongaline is said to consist of tonga, cimicifuga racemosa, sodium salicylate, colchicum and pilocarpin. This jumble of drugs would be merely ludicrous, if anything that degrades therapeutics could be considered so lightly. Peacock's Bromides is said to consist of the bromides of sodium, potassium, ammonium, calcium and lithium. The exploiters claim superiority over extemporaneously prepared mixtures because of the absence of contaminating chlorids said to be present in commercial bromids.

The truth is that the chlorids are used as antidotes in bromid poisoning. Bromidia, Tongaline and Peacock's Bromides have been the subjects of reports of the Council on Pharmacy and Chemistry (Jour. A. M. A., March 2, 1918, p. 642).

Tyree's Antiseptic and Aseptinol.—Revolutionary changes in the medical sciences have been so numerous and so rapid that the general practitioner has been unable to keep pace with them. In the resulting confusion the nostrum maker has seen his opportunity for exploiting his useless, unscientific or dangerous preparation. Because of the danger of therapeutic chaos, the American Medical Association established the Council on Pharmacy and Chemistry to place the results of therapeutic progress before the medical profession in an impartial manner. Are you availing yourself of the work of the Council, or are you prescribing proprietaries on the advice of their promoters or are you using drugs of established value? Are you prescribing "Tyree's Antiseptic," so-called, or are you using an antiseptic about which there is no mystery, for which no false claims are made and which is really effective?

Tyree's Antiseptic Powder was claimed to be a combination of "borate of sodium, alumen, carbolic acid, glycerin and the crystallized principles of thyme, eucalyptus, gaultheria and mentha." "Pulv. Aseptinol Comp." is claimed to combine boric acid, the salts of aluminum, crystallized phenol, and the active crystalline principles of thymus, mentha and gaultheria. As a twin may differ from his brother by a wart, so Aseptinol was claimed to contain hydrastis canadensis in addition. An analysis of Tyree's Powder showed it to be essentially a mixture of boric acid, zinc sulphate with insignificant amounts of odorous prineiples. In view of the misrepresentation in one case, it is difficult to understand why it should have been taken for the model of the other. These twin nostrums have been exploited by similar preposterous elaims; they are utterly unfit for the treatment of the various conditions for which they are or have been recommended.

More important than the relative merits of nostrums such as these is the question whether the medical profession is going to help perpetuate the chaotic conditions that the use of such nostrums foster (Jour. A. M. A., March 30, 1918, p. 949).

Obituary.

CHRISTIAN—Dr. Dodson Christian of Springdale, age 67, died January 12, 1918.

Book Reviews.

Military Ophthalmic Surgery.—By Allen Greenwood, M. D., Major M. R. C. Including a chapter on trachoma and other contagious conjunctival diseases by G. E. De Schweinitz, M. D., Major M. R. C., and a chapter on ocular malingering by Walter R. Parker, M. D., Major M. R. C. Illustrated. Published by Lea and Febiger, Philadelphia. Price $1.50.

This is Medical War Manual No. 3. Authorized by the Secretary of War and under the supervision of the Surgeon General and the Council of National Defense, compiled with the idea of providing in condensed form suggestions that may be helpful to medical officers who have to deal with the special opthalmic problems which arise in the daily routine of active army work.

Neurosyphilis, Modern Systematic Diagnosis and Treatment.—Presented in one hundred and thirty-seven case histories. By E. E. Southard, M. D., Sc. D., Bullard Professor of Neuropathology, Harvard Medical School; Director Psychopathic Department, Boston State Hospital; etc., and H. C. Solomon, M. D., Instructor in Neuropathology and Psychiatry, Harvard Medical School; Acting Chief-of-Staff, Psychopathic Department, Boston State Hospital; etc. With an introduction by James Jackson Putnam, M. D. Octavo, 500 pages, with 25 full page illustrations. Published by W. M. Leonard, Boston, 1917. Price $5.00.

The need of this work, its timeliness, the authority of its sources and clearness of presentation, and finally its practical value to the general physician to whom it is first addressed, seem to make it deserving of particular attention at this time. As Prof. Putnam says in speaking of this book, "The physician who utilizes this volume cannot but emerge from his study a more thoughtful person than he was at the period of his entry."

American Illustrated Medical Dictionary (Dorland). A new and complete Dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Ninth edition, revised and enlarged. Edited by W. A. Newman Dorland, M. D. Large octavo of 1179 pages with 331 illustrations, 119 in colors. Containing over 2,000 new terms. Published by W. B. Saunders Company, Philadelphia, 1917. Flexible Leather, $5.00; thumb index, $5.50.

This attractive volume is the best dictionary that has ever received our attention, and one

that most all physicians would want to keep on his desk for constant reference.

To state briefly we wish to mention twenty-three valuable features of this dictionary: New Words; War Words and War Abbreviations; Capitalizations; Pronunciation; Etymology; Historical Aspect; Practical Arrangement; Extreme Flexibility; Anatomic Tables; Chemical Formulas; Signs and Symptoms; Methods of Treatment; Dosage and Therapeutic Table; Tables of Exanthemata; Serums; Tests; Reactions, Staining and Fixing Methods; Operations; Veterinary Terms; Dental Terms; Medical Biographies; Every Word Defined; An Atlas.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of The American Medical Association for 1917.—Cloth. Price, postpaid, 50 cents. Pp. 169. Chicago: American Medical Association, 1918.

This volume contains the reports of the Council which were adopted and authorized for publication during 1917. It includes reports of the Council previously published in The Journal of the American Medical Association, and also reports, which because of their highly technical character or of their lesser importance, were not published in The Journal.

In this volume the Council discusses the articles which were examined and found to be in conflict with the rules for admission to New and Nonofficial Remedies. Among these reports are discussions of such widely advertised proprietaries as Corpora Lutea (Soluble Extract), Wheeler's Tissue Phosphates, The Russell Emulsion and The Russell Prepared Green Bone, Trimethol, Eskay's Neuro Phosphates, K-Y Lubricating Jelly, Ziratol, Hepatico Tablets, Hemo-Therapin, Venosal, Surgodine and Kalak Water. A report on Iodeol and Iodagol covers 51 pages and illustrates the exhaustive investigation which the Council is often obliged to make of proprietary articles. Similarly illustrative of the Council's thoroughness is the clinical study of Biniodol, a solution of mercuric iodid in oil, and the investigation of Secretin-Beveridge, made for the Council by the physiologist, Professor Carlson, of the University of Chicago. The volume also contains reports which explain why certain preparations, such as Alcresta Ipecac tablets, the German-made biologic products and antistaphylococcus serum, which were described in the last edition of New and Nonofficial Remedies, are not contained in the current 1918 edition. Those who wish to be informed in regard to proprietary remedies should have both the annual Council Reports and New and Nonofficial Remedies.

New and Nonofficial Remedies, 1918, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1918. Cloth. Price, postpaid, $1.00. Pp. 452+26. Chicago: American Medical Association, 1918.

This annual should be in the office of every physician. It lists and describes all those proprietary remedies which the Council on Pharmacy and Chemistry has examined and found worthy of the confidence of the medical profession; that is, articles the composition of which is disclosed, which are exploited truthfully and which give promise of some probable therapeutic value. The description of each article aims to furnish a statement of its therapeutic value and uses, its dosage and method of administration as well as tests for the determination of its identity and quality. Articles of similar composition are grouped together and in most cases each group is accompanied with a general article which compares the members of a group with each other and with the established drugs which they are intended to replace. The description of the individual articles and the general discussions are written by experts and furnish information of a trustworthiness unsurpassed by any other publication. The book is especially valuable to the busy physician who desires a concise and up-to-date discussion of such subjects as digitalis therapy, the newer solutions for wound sterilizations, iron therapy, food for diabetics, the value of sour milk therapy and of the bulgarian bacillus, the use of radium externally and internally, of arsphenamine (salvarsan, arsenobenzol, diarsenol) and neoarsphenamine (neosalvarsan, neodiarsenol), of local anesthetics, and other advances in therapeutics.

In addition to this annual issue of the book, supplements are sent from time to time to purchasers. With this volume ready for reference, the physician will be able to determine which of the proprietary remedies that are brought to his notice deserve serious consideration. At least he will be justified to subject to close scrutiny those which have not met the requirements for acceptance for New and Nonofficial Remedies.

The book is sent postpaid for one dollar. Address the American Medical Association, 535 North Dearborn Street, Chicago.

RECONSTRUCTION

Spring is nature's period of reconstruction, "when the world is made anew." Then is when the Call of the Open comes strongest to every shut-in, the invalid or the cripple. With the aid of an invalid chair or the proper orthopedic appliance, nature will supplement the physician's efforts.

Orthopedic Apparatus

Orthopedic apparatus, representing the latest scientific ideas, is manufactured by us to meet the special conditions of each individual case. A thoroughly organized department, with years of experience in the production of these special appliances, is ready to co-operate with the physician in the selection and designing of appliances for every case. We issue a complete catalog of standard appliances and this catalog will be sent free if desired.

Invalid Rolling Chairs

A complete line of invalid chairs, meeting every condition, is manufactured by us and sold direct to the physician at manufacturer's prices. A substantial saving in price is secured through this direct selling policy, while the quality and designs of the chairs are of the highest. Our complete invalid chair catalog will be gladly sent upon request.

The prices are attractively low—The quality is uniformly high.

FRANK S. BETZ COMPANY, Hammond, Ind. Chicago Salesroom 30 East Randolph St.

THE BATTLE CREEK SANITARIUM AND HOSPITAL

ESTABLISHED 1866

MEDICAL
NEUROLOGICAL
OBSTETRICAL
SURGICAL
ORTHOPEDIC
RECONSTRUCTIVE

Educational Departments

Training School for Nurses
Normal School of Physical Education
School of Home Economics and Dietetics
Students received on favorable terms.

Registered trained nurses, dietitians, and physical directors supplied.
Descriptive literature mailed free upon request.

THE BATTLE CREEK SANITARIUM

BATTLE CREEK BOX 184 MICHIGAN

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIV. LITTLE ROCK, ARK., MAY, 1918 No. 12

Original Articles.

CASE RECORDS FOR THE GENERAL PRACTITIONER.*

By S. W. Douglass, M. D.,
Eudora.

We find a discussion of this subject necessary for two reasons: the systems being sold to physicians are too cumbrous and impractical, and there are many physicians that use no record of any kind. In presenting this subject we are trying to offer something practical.

It is hard to conceive how one can get along without using some kind of record. Some will say that it takes too much time, or that they cannot afford one of these costly systems. When a physician gets so busy that he can not give proper time to each patient that comes, he should turn off the excess and serve only those to whom he can do justice. The very first essential of honest service is a careful diagnosis. The first essential of a correct diagnosis is a careful account of the subjective and objective symptoms. In order to get a true concept of each case, unless it be of the very simplest nature, this form should never be omitted. There are so many points that are likely to be omitted, that the memory aolne should not be depended upon for detail. To be accurate in anything requires system, and accuracy in diagnosis is the doctor's best guarantee of a thriving practice. In a properly arranged record the symptoms not only appeal to the mind through the ear, but through the eye also. After the patient is through relating the symptoms and he has been examined, the group of symptoms may be compared with more leisure.

It is very easy to ask too few questions and to make no examination at all except to feel the pulse and to look at the tongue. The life of the patient and the reputation of the physician is at stake. These two momentous things should inspire caution. Do not jump at conclusions, but try to have sufficient evidence for the diagnosis. Proper history taking requires much diplomacy, tact and medical knowledge. The patient should never feel that the physician is in a hurry. Sit quietly, even if in a great hurry, and wait for a favorable time to interrupt the patient's flow of talk.

Keeping a record of each case is a constant source of inspiration to more thorough and efficient work. To be able to see on paper your diagnosis and treatment is a constant reminder to be thorough. It really enforces thoroughness.

As a matter of reference, a record is invaluable. They become unimpeachable evidence in legal proceedings and in health and accident insurance. When a chronic patient returns a month after his first treatment, we feel the sting of embarrassment and regret when we cannot conjure up into our minds neither of two great facts; the diagnosis nor the treatment. In this case a record would well pay the physician and doubly pay the patient. Many times have we seen the glow of satisfaction on the face of the patient when we turn to his record and begin to review his old symptoms of some months or perhaps years before. If his complaint is the same as before, your task this time is easy because the diagnosis and treatment is recorded before you.

An ideal case record will contain at least one presenting symptom for any common disease that might occur in any portion of the body. Separate sheets for different classifications of diseases, as cardiac, pulmonary, genito-urinary, etc., have been tried and found too cumbersome. These separate sheets are indispensable to the specialist. To keep this general record down to a practical size has been the greatest difficulty. To be of real service the form and size of the sheets must be such that it takes a minimum of time and effort to make the entries. In the arrange-

*Read before the Arkansas Medical Society, at the forty-first Annual Session, Little Rock, May, 1917.

ment, all the subjeetive symptoms should be grouped first. This gives a ehanee to fill in the blanks with less effort as the patient reviews the symptoms. The result of the physieal examination is then grouped at the last.

After aseertaining the name and address of the patient, the first question will bring out what Cabot is pleased to eall the presenting symptom. When we are informed that it is headache, eough, fever, pain in the pelvis, diffieult urination, ete., a train of eoneomitant symptoms shoot up before our minds like the figures on a eash register. After we have an idea of the trouble, our questions leave the reeord and follow this leading symptom.

The next question on our reeord is, What do you think eaused this trouble? Then, How long have you been siek? Did you ever have this trouble before? What was the first symptom? Did it eome on suddenly or gradually? What medieines have you taken and with what results?

Have you any pain? What kind of pain? Is it eonstant? When does it hurt worst and what eauses it? What gives relief? Is there any tenderness or swelling? Is there headaehe or vertigo? When is it worst? Do you sleep well? Are you losing strength? Do you have palpitation of the heart or shortness of breath?

How is the appetite and digestion? Is there nausea or vomiting? If so, when and of what kind? Is there a bad taste in the mouth? Have you sore throat or sore nose?

Do you have fever? How long? Onset sudden or gradual? When is it highest? Do you sweat it off? Do you have chills or aehing spells? Are the bowels regular? What kind of aetions? Is there pain at stools? How often do the kidneys aet? What is the quantity and eolor of the urine? Is there pain at urination?

Have you a eough? Is it loose or tight? Does it appear to be from the throat or lungs? Is there pain when eoughing? How mueh sputum and what kind? Any blood?

Is there any eruption on the skin? What kind? How long have you had it? Does it iteh? Have you enlarged glands?

What is your age? Married or single? Have you lost or gained weight? What habits have you?

After the personal and family history is aseertained in all proper eases, the physieal examination is made. The form shows a plaee to reeord the pulse beat, kind and regularity. The respiration, kind and regularity. Heart murmurs, regularity, displaeed apex and blood pressure. Lung auseultation and pereussion. Abnormalities of abdomen, liver and spleen.

The last thing reeorded is the diagnosis and treatment. In recording the treatment it will be found that abbreviations and ehemieal formula are of great serviee. The diagnosis should be written at the bottom of every sheet. If this eannot be done, it will be found extremely helpful to write the words, "Not known."

DISCUSSION.

Dr. Carmichael (Little Rock): Any sort of record that one would attempt to keep would be practically valueless unless a complete and thorough examination was made in every case. The data and findings should be carefully noted at the time of examination. My recent experience at the County Hospital demonstrated to me that where there were many patients to be treated the examinations were likely to be hurried and in a day, or half a day, thereafter developments often indicated that our diagnosis was incomplete; and further investigations would modify our clinical findings to more or less extent.

Dr. Wear (Paris): I was always inclined to case records. I have found them very satisfactory; but I have never found any "system" that was satisfactory. For a long time I have used a method of recording cases that I devised myself. On the card I would write all the things I could find out about the case in hand. I carried a supply of cards with me; but I always found it a good deal of trouble and a good deal of work to go thoroughly into details. I found these records of great value, however. At first I did not always say what I thought in dealing with these patients. It might be very helpful and convenient when one gets used to it to have a blank card and go over the case thoroughly and jot down the essential points. I used to keep the financial statement on the same record, but I found it confusing and hard to keep accounts that way. I use a card index system. The secret of the whole thing is to record your data accurately and file where you can readily refer to it.

Dr. Douglass (closing): I am glad to hear the kind words of appreciation and friendly suggestion in response to my plea for systematic case records. Of course, everyone has to work out a system best adapted to his needs. The one here outlined is not cumbrous, but is sufficiently full to be of great service. The main point that I am pleading for is to at least record the main symptoms, the diagnosis and the treatment.

Date..... Name..... $
Order..... Address..... $
L. Symp..... Cause..... $
H. L. Sick..... Same..... $
First Symp..... Sud.....Grad.....
Medicine taken .....
Pain..... Kind..... Const.....

Worse..... Time..... Relief.....
Tender..... Swell. .....
Head A..... Time..... Vert.....Sleep.....
Week..... Palpi..... Dysp.....
Apet..... Diges..... Naus.....Vom.....
Teeth..... Tong..... Throat.....
Fever..... How L..... Onset..... Time.....

Sweat..... Chill..... Ache.....
Bowel A..... Kind..... Pain.....
Kid. A..... Quan..... Color..... Pain.....
Cough..... How L..... Loose.... Tight.....
Pain... Spit from T.—L..... Color... Blood...
Eruption..... Kind..... How L..... Itch.....
Age..... M... S... Weight... Dec.... Habit....
Pulse..... Kind..... Regular..... Artery.....
Respi..... Kind..... Reg.....
Heart Mur..... Reg..... Apex.... B. P.....
Lung. Ause..... Percus.....
Abdomen..... Liver..... Spleen.....
Diagnosis .....
Treatment .....

THE EARLY DIAGNOSIS AND TREATMENT OF TABES DORSALIS.*

By Loyd Thompson, Ph.B., M. D.,
Hot Springs.

Since the epoch-making work of Noguchi1, who succeeded in demonstrating the *Treponema pallidum* in the posterior column of the dorsal portion of the spinal cord of a tabetic, we know that tabes dorsalis, or locomotor ataxia, is a true syphilitic process, and the terms, para-syphilitic and meta-syphilitic should be discarded. With this definite knowledge, the early recognition of this condition takes on new significance. In a well established case of tabes where such symptoms as typical gait, absence of knee jerks, Argyll-Robertson pupil, etc., are present, the diagnosis is easy; but often when the condition is recognized, so much damage has been accomplished that a complete cure cannot be brought about. However, with the modern methods of treatment, even the most advanced cases often show marked improvement.

The early signs and symptoms of tabes dorsalis vary almost as much as the manifestations of syphilis, of which tabes is but one; and it is only the physician who is alert who recognizes the condition in its early stages. The symptoms of this malady may be described under the following heads: Sensory, motor, visual, auditory, reflex, visceral, including the bones, joints and muscles, and trophic.

Sensory symptoms are both *subjective* and *objective,* the former being in the majority of cases the earliest symptoms of the disease.

The *subjective sensory symptoms* consist of pains of varying location and intensity, the most characteristic ones being the so-called *lightning* or *lancinating* pains, and certain paresthesias. The lightning pains are most frequently noted in the lower extremities, often beginning in the great toes and being mistaken for gout. They may, however, be felt in the face, arms or trunk. They are described by the patients as most excruciating in character. Their duration varies from a few minutes to several hours or even days and can be relieved only by morphine. There is usually no correspondence of the pain with the distribution of the nerve, although the pain may sometimes simulate sciatica. These pains may recur with rather startling regularity in the same location, and if beginning early in the course of the disease, they may disappear later, while if they are not observed early, they may not occur at all. It has also been noted that severe pains occurring early are, as a rule, followed by a prolonged course of the disease.

Other pains of a less severe nature but more permanent are noted. The chief of these is the so-called *girdle pain* which the patient describes as the sensation of a tight belt around the body. It generally is narrow in extent, may be located at any level of the trunk, but is sometimes described as feeling like an iron jacket. A similar pain on the arms or legs is often noted, and described as feeling like a tight bracelet or tightly wound rope on the extremity. These pains may last for long periods of time, even years, and may disappear only to recur at a later period.

The pains referable to the various viscera will be described later.

Certain *paresthesias* such as numbness, formication, tingling, prickling, the sensation of walking on velvet, as if cold water were running over the body, the feeling of cobwebs on the skin, etc., are often observed. The so-called *Hutchinson mask,* the sensation of the face being covered with a mask or cobweb, is not rare.

Of the *objective sensory symptoms* the most frequent is analgesia which affects the cutaneous surface, and also the bones, joints and muscles. Severe injuries, burns, cuts, bruises and even fractures and dislocations are unaccompanied by pain. Analgesia of the cutaneous surface is found in areas which have a tendency on the trunk and extremities to bilateral distribution, while on the head the distribution is usually unilateral. On the upper extremities the most frequently affected areas are the fingers and ulnar border

*Read before the Arkansas Medical Society, at the Forty-first Annual Session, Little Rock, May, 1917.

1. Noguchi; Jour. Cut. Dis., 1913, xxxi, p. 543.

of the forearm. The sole of the foot, the heel, the toes and the inner surfaces of the thighs are favorite locations of the analgesia in the lower extremities. On the trunk the areas most often affected are over the pectoral regions, the umbilicus, the inguinal regions and the shoulders. The areas of analgesia are often marked by borders of hyperesthesia. The patient is frequently unaware of his affliction until it is demonstrated to him, and shows great surprise when a pin is stuck deeply into his body without pain.

Areas of *hyperalgesia* are also common but less symmetrically located and less frequent. Not only may the areas be more sensitive to such pains as the prick of a needle, but may be hyperalgesic to heat and cold. Often these areas are the seat of the lightning pains and appear during the crises.

Anesthetic areas are very frequently observed in tabes. The most typical is the so-called *tabetic cuirass*, which is an area encircling the trunk, usually three or four inches broad, but sometimes occupying the entire length of the trunk and often associated with the girdle pain. Other areas of anesthesia are sometimes found on the inner surfaces of the arms and forearms, the ulnar margins of the hands, the outer margins of the feet, the outer sides of the legs, the anterior and internal surfaces of the thighs and in the perineum. Not infrequently there are alterations in the pain and tactile sense, the individual being unable to tell the nature of the pain, perhaps calling a pin prick a pinch. The pain sense may also be retarded, the prick of a pin being felt as a touch immediately and later (three to ten seconds) felt as pain.

A striking symptom in some cases is an *impairment* of *stereognosis*, the patient being unable to distinguish by the sense of touch such objects as a key or a coin.

Motor symptoms in tabes consist of *ataxia*, which may be more than that of locomotion, *involuntary movements*, and *paralyses*.

The *ataxia* is not as a rule, an early symptom of tabes, usually developing after sensory symptoms have been present for some time. The ataxia, however, may be the first symptom to call the attention of the patient or the physician to the true nature of the condition. It is usually a gradual development, the patient first noting that he has difficulty in ascending or descending steps or walking in the dark. He soon also finds it difficult to stand with his feet close together without swaying (Romberg's sign). Before long a change in gait is noted, the feet being placed on the ground differently, and he walks with a wide base and finds a cane of assistance. Gradually it is noticed that the feet are raised too high, and placed too far forward and are stamped down suddenly. Later standing, even with a support, becomes impossible, the feet slipping out in front of him. Ability properly to control movements of the feet and legs while lying in bed becomes lost, the patient throwing the foot wide of the mark when told to touch some object with it.

Ataxia of the upper extremities may not occur, may follow much later that of the lower extremities and may in rare instances occur first. This is noticeable in such movements as writing and grasping articles.

The *involuntary movements* of tabes consist mainly of jerking movements of the limbs or portions of the limbs as a thumb or finger, and are of comparative frequency. They may occur early in the course of the disease or they may be a later manifestation. They may occur while the patient is asleep or while he is awake and are usually uniform for each individual.

The *paralyses* found in tabes consist of monoplegia, hemiplegia and paraplegia, paralysis of the tongue and larynx, facial paralysis and ptosis. These paralyses are due to organic and vascular changes in the cerebrum and cord. They are of comparatively infrequent occurrence and may be transitory or permanent.

Visual Symptoms. Ptosis has been mentioned as one of the symptoms of tabes and paralyses of the muscles of the eyeball also occur, the external rectus being most often affected.

Anomalies of pupillary reaction are found in the vast majority of tabetics. Of these the so-called Argyll-Robertson pupil is the most important. This phenomenon, which consists of a loss of light reflex, while the reaction to accommodation remains intact, is found in from 50 to 70 per cent. of cases. It is usually bilateral but may be unilateral. Other pupillary disturbances are inequality, pin-point size, increase in size, irregularity in outline, loss of accommodation and absolute iridoplegia. Sluggishness of the pupils with slight irregularity in outline or inequalities are very often early symptoms of tabes, while the other pupillary disturbances are, as a

rule, of later occurrence. Optic atrophy occurs in a small percentage of cases and is, as a rule, of early development, the resulting defect in vision or blindness often being the first symptom to lead the patient to the physician.

Auditory Symptoms. According to Murpurgo[2], auditory defects are found at some time during the course of the disease in 80 per cent. of tabetics. These consist of recurring sounds like the ringing of bells, rushing water, whistles, musical sounds, etc., and impairment of hearing. The sounds are due to affections of the cochlear branch of the auditory nerve, while the impairment of hearing may be due to degeneration of the auditory nerve, or to abnormalities in the middle or external ear.

Reflex Symptoms. Diminished or absent deep reflexes, especially the knee-jerk, is one of the earliest and most frequent symptoms of tabes. It is usually bilateral but may be confined to one side. The superficial reflexes may or may not be disturbed.

Visceral Symptoms. The most important and frequent of the visceral symptoms are those referable to the stomach. The so-called *gastric crises,* which are of sudden onset, may occur very early in the course of tabes, in fact, may be the only symptom observed, the patient being treated for other types of gastric disorder. Pain is the most conspicuous feature of these attacks, is located in the epigastrium, just beneath the xiphoid cartilage; and may radiate in all directions. It is most excruciating in character, often being so severe as to cause unconsciousness. Vomiting also occurs, the attacks being frequent and uncontrollable. It may or may not be accompanied by straining. It occurs regardless of the presence of food in the stomach, although the ingestion of even a very small quantity of food or water during a crisis is followed by its immediate ejection. The vomiting following the first ejection of whatever undigested food is present is soon seen to consist mainly of gastric mucous, later mixed with bile, and if the vomiting is long continued, may contain blood.

It has been shown that in the beginning of the attacks a hyperacidity exists, due to an increase in hydrochloric and lactic acids, which is diminished throughout the attack. The gastric crisis may last for an hour or for days, or even weeks, and is accompanied by marked prostration, the patient appearing as if suffering from shock. They may end as abruptly as they begin with a cessation of pain and a desire for food. One crisis may be the only one experienced during the course of the disease, but, as a rule, they are repeated sometimes daily, but usually only at intervals of several weeks or months. They may diminish in frequency and severity as the disease progresses, or they may be so severe as to cause death. Gastric crises without pain, but with severe nausea and vomiting, are sometimes observed.

Intestinal crises are of rather rare occurrence, are characterized by marked diarrhea but without pain. Constipation also may occur. *Rectal* crises are more frequent and are accompanied by most intolerable tenesmus, and the passage of small amounts of bloody mucous.

The *bladder* is the seat of some of the earliest and most constant symptoms of tabes. The usual condition is one of difficulty in starting urination or of incontinence. Vesical tenesmus of a most distressing character is sometimes noted.

Nephritic crises have been described, but may be due to true renal colic.

The genital organs are very frequently affected in tabes. Diminution of the sexual appetite and even impotence are observed in about 50 per cent. of the cases and is sometimes preceded by an excessive sexual appetite. Impotence may occur very early in the course of the disease or may only appear as a late manifestation. Diminution of loss of the cremasteric reflex and the so-called *virile reflex* usually accompany impotence of tabes. The *testicle* is sometimes the seat of analgesia and is often accompanied by atrophy of the organs. *Clitoris crises* may occur in females.

Laryngeal crises occur quite frequently and consist of spasms of the laryngeal muscles. The symptoms are noisy inspiration and expiration with cough and usually more or less dyspnea and pain.

The *bones* are very frequently the seat of spontaneous fracture due to a rarefication and decalcification. The most frequently fractured bones are the femur, the tibia and fibula and the ulna and radius, although any of the long bones may easily be broken. The bones develop this condition early in the course of the disease and spontaneous fractures may occur before any symptoms of tabes have been noticed, or they may occur later.

2. Arch. f. Ohrenheik, 1890.

The Joints. The so-called *Charcot's Joint,* which sometimes occurs in tabes, usually is first manifested by an abnormal range of motion. This is followed by marked swelling, with no redness nor tenderness, and little or no pain. The large joints are most frequently affected, but no joint is exempt.

The *muscles* in tabes usually show more or less hypotonus which corresponds to the ataxia of the limbs. It is readily appreciated by the ease with which overextension of the elbows, knees and ankles, and the flexion of the hip and abduction of the thighs may be produced.

The muscles of tabetics also in some cases present an atrophy, the onset of which is very insidious and which may occur early in the course of the disease. The most frequent seats are the foot and leg muscles and the small muscles of the hands and the forearm. The resulting deformities, such as equinovarus, are due to the atony and not to contracture. The wasting and flaccidity of the muscles observed late in the course of the disease is to be distinguished from this atrophy.

The *trophic* symptoms of tabes consist mainly of certain cutaneous lesions such as herpes zoster, trophic dermatoses, hyperidrosis, anidrosis and hypertrophies of the epidermis of the extremities, and are of more or less rare occurrence.

So-called *perforating ulcer* is more frequently found, especially on the foot. It begins as a callous spot on the sole which is followed by deep ulceration and is very refractory to treatment.

Decubitus is noted only in the terminal stages of the disease.

As stated above, the diagnosis of a fully developed case of tabes dorsalis, as a rule, presents little or no difficulty, but in its early course it may be mistaken for many other conditions. The various visceral crises and lightning and girdle pains are quite frequently ascribed to other causes, especially if occurring before other symptoms. This is particularly true of the gastric crises which are often considered signs of various gastric disorders and not infrequently patients who have a beginning tabes are treated for gastritis, gastric ulcer or what not. These occurrences but serve to emphasize the importance of a thorough examination of all patients presenting themselves for diagnosis, as very early in the course of tabes pupillary anomalies and disturbances of reflexes will be found; sometimes even before subjective symptoms are present.

Of course it is impossible to make a diagnosis of tabes alone upon these early pupillary or reflex disturbances, or upon the occurrence of gastric or other crises, and it is in these early cases that the modern clinical laboratory is of the greatest usefulness.

Long before Noguchi demonstrated the *Treponema* pallidum in the spinal cord of a tabetic, it was known that the Wassermann test was positive in the blood sera of a certain percentage of tabetics. This is variously estimated as from 50 to 70 per cent. With the new technique of performing the Wassermann which I have recently developed, and which will be the subject of a future report, I think the percentage of positives will be greater. However, it is the spinal fluid of tabetics which gives us our greatest information. Rhachicentesis in the hands of an expert is such a simple operation that all suspicious cases should receive the benefit of spinal fluid examinations. The spinal fluids of practically all untreated tabetics give positive Wassermann tests with large quantities of spinal fluid, that is up to 2 c. c.

The lymphocyte count of tabetic spinal fluid varies from normal to several hundred, although counts of from 75 to 100 are the rule.

The globulin, as a rule, is increased in the spinal fluids of tabetics and the Lange colloidal gold test while not showing a typical curve for all cases, usually deviates from the normal.

Treatment. The all important point in the treatment of tabes is an early diagnosis; the next important point is intensity of attack, and finally there must be persistence.

There are two schools in the treatment of tabes, those who believe in intraspinal therapy and those who do not. I am of the former, and I think the majority of the latter are men who have had little or no experience with this method of treatment. That intraspinal therapy is rational is proven both by experimental and clinical data.

Lorenz[3], working with sodium cacodylate, found that the spinal fluid contained no arsenic following the intravenous administration of small doses. With doses of 1 gram, however, traces of arsenic were found in the spinal fluid one hour after administration.

3. Lorenz; Med. Rec., 1912, lxxii, p. 185.

Camp[4] administered 0.6 gram of salvarsan intravenously and performed spinal puncture at varying periods from 15 minutes to 40 hours after injection. In only one instance was arsenic found in the spinal fluid. This was in a case of so-called secondary syphilis, in which the spinal puncture was performed 15 hours after the injection of the salvarsan.

Engman, Buhman, Gorham, and Davis[5] performed spinal puncture on four pareties, withdrawing 10 c. c. of spinal fluid immediately, after which a full dose of neosalvarsan was administered intravenously. In two of the cases spinal puncture was performed again in 48 hours and in the other two in 98 hours. The examination of the fluids for the presence of arsenic by the Gutzeit and Marsh tests were negative in all cases.

Sicard and Bloch[6] were unable to find arsenic in the spinal fluid of patients following either the intramuscular or subcutaneous administration of 0.4 gram of salvarsan. However, traces of arsenic were found in the spinal fluid of one patient two hours after the intravenous administration of 0.4 gram of salvarsan.

Hall[7] administered neosalvarsan intravenously to five patients, performing spinal puncture one and one-half hours, six hours, and twenty-four hours following injection without finding arsenic in the spinal fluid. Salvarsan was injected intravenously into six patients, the spinal fluid showing arsenic only in two cases after twenty-four hours.

Swift[8] states that with the pooled fluids up to 100 c. c. withdrawn the day following the intravenous injection of salvarsan almost uniformly negative results were obtained, and that when arsenic was found it was in such small quantities it could not be estimated.

Further evidence that solutions injected subcutaneously and into the blood stream do not reach the tissues of the cerebrospinal axis nearly as readily as when injected subdurally is furnished by Woolsey[9]. His investigations also show the rationale of intracranial injections in certain cases. This worker found that repeated subcutaneous injections of trypan blue over a period of several days and intensely staining all other tissues of the body failed to reach the central nervous system except in exceedingly small quantities. Intra-arterial injections resulted in intense generalized blue color of the other tissues which was in marked contrast to the creamy whiteness of the central nervous system with only slight tinting of the cranial dura and ventricular plexus. Injections into the jugular vein were always followed by intense staining of the tissues, with the exception of the central nervous system. On the other hand, subarachnoid lumbar injections of trypan blue resulted in marked staining of the meninges of the cord up to the level of the cervical enlargement above which the intensity of the staining diminished to the foramen magnum, while the cranial meninges showed a distinct deep blue, in places they also showed many areas hardly more deeply stained than in the intravascular injections. The substance of the cord to a depth of ½ to 1 mm. below the surface was stained a distinct blue, while the brain substance showed no such staining.

In regard to the clinical data now available, space does not permit me to quote in detail, although a wealth of literature has sprung up concerning this method of treatment, and almost limitless data could be quoted.

The work of Swift[10], however, is probably as convincing as any. This worker showed that of the 34 tabetics, in whom observation extended over at least one year, 3 received intraspinal treatment alone, while the remainder received intravenous treatment as well. In 25 cases, or 75 per cent., negative Wassermann reactions were obtained with 1 c. c. of spinal fluid, while in 14 of these cases the reaction was negative with 2 c. c. In 8 cases the Wasserman was negative with 1 c. c. and positive with 2 c. c. A number showed negative reactions for from one and a half to two and a half years.

My own experience now covers more than 250 injections, and my clinical results are very satisfactory. The following case is illustrative:

M. J. C. Male. Age 45. White. Single. Railroad Mechanist and Bartender.

Family History: Mother died of tuberculosis.

4. Camp; Jour. Nervous & Mental Diseases, 1912, xxxix, p. 809.

5. Engman, Buhman, Gorham and Davis; Jour. Am. Med. Assn., 1913, lix, p. 735.

6. Sicard and Bloch; Bull. et mem. Soc. med. d. hop d. Paris, 1911, 3 S. xxxi, p. 664.

7. Hall; Jour. Am. Med. Assn., 1915, lxiv, p. 1384.

8. Swift; Ibid., 1915, lxv, p. 209.

9. Woolsey; Jour. Nervous and Mental Diseases, 1915, xlii, p. 447.

10. Swift; Jour. Am. Med. Assn., 1915, lxiv, p. 1384.

Past History: Gonorrhea seven or eight years ago.

Present History: Chancre of penis 16 or 17 years ago. One month to six weeks later had slight eruption on chest. Chancre was cauterized but no constitutional treatment was administered. In July, 1911, suffered with cramps in the stomach, the condition being diagnosed acute indigestion. The following May a Wassermann reaction, made on the advice of a friend, was strongly positive and during the next year and a half five doses of salvarsan were administered. In March, 1915, patient came to Hot Springs, at which time he was suffering with severe gastric pain, nausea and vomiting. His physician prescribed inunctions of mercury, of which he received twenty-two, with little or no relief. He was then compelled to return to his home, but came to Hot Springs again in October, 1916, he having taken no treatment in the interim. His physician again prescribed inunctions of mercury and sixty-four were administered in two different courses, with one month intervening.

On February 14, 1917, he had a most severe attack of gastric pain with nausea and vomiting. I was summoned and found him in excruciating agony. I immediately administered 1/4 grain of morphine hypodermically which was repeated twice during the next four hours before relief was afforded.

The following day the patient was resting easily and a thorough physical examination was made.

Examination: The patient is a rather undernourished male of 45 years. The examination of the genitals, lymphatic glands, skin, mucous membranes, bones, joints, heart, lungs and abdominal viscera is negative.

The pulse is 90; temperature 98; systolic blood pressure 130; diastolic 85.

Both pupils are irregular in outline, contracted, and do not react to either light or accommodation. All deep reflexes are exaggerated.

Temperature and pain sense and stereognosis, normal. Romberg slightly positive.

Urine, normal. Blood Wassermann XXX.

The patient's condition was explained to him and he was strongly urged to undergo spinal puncture and intraspinal therapy. This he refused to do at this time. He was, therefore, placed on daily intravenous injections of 1-6 grain of mercury benzoate, and on February 25 and March 5 he received .3 grm. of Galyl intravenously.

On March 8 patient began to have excruciating pains in his legs and abdomen, with nausea and vomiting. These continued practically uninterruptedly in spite of 3/4 to 1 grain of morphine daily until March 15, when patient consented to intraspinal therapy.

On this day 0.25 grm. of salvarsan was administered intraspinally and 0.4 grm. intravenously. The relief from the pains and vomiting was almost immediate and the next day the patient stated that he felt better than he had for weeks.

The spinal fluid at this time showed a strong four plus Wassermann with 1 c. c., a marked increase in globulin and .57 lymphocytes per cm. The colloidal gold curve was 1112330000.

Intravenous injections of mercury were continued and three more intravenous and intraspinal injections of salvarsan were administered at weekly intervals.

At this time the patient was forced to return to his home.

There had been no return of his symptoms and spinal fluid removed at the time of the last intraspinal injection showed a two plus Wassermann with 2 c. c., negative globulin, and 13 lymphocytes. The blood Wassermann was negative.

It will be noted from the above case that I do not confine my therapeutic attack to intraspinal injections, but make use of the older methods of treatment as well; that is, I administer salvarsan intravenously and mercury either intravenously or intramuscularly. Mercurial inunctions are rarely prescribed.

The technique which has given the greatest satisfaction in my hands is a modification of Ogilvie's method, and it is as follows: Salvarsan is administered intravenously and at the same time 10 to 15 c. c. of blood are withdrawn and immediately centrifugalized at a high rate of speed. Two or three c. c. of clear serum are collected, to which is added 0.25 to 0.5 mg. of salvarsan saved from the intravenous dose. The serum is placed in the incubator at 37° C. for twenty minutes followed by thirty minutes in the water bath at 55° C. It is then injected intraspinally as soon as possible.

Lumbar puncture is made in the usual manner with the patient lying on his right side as near the edge of the bed as possible, or on the operating table. The needle is inserted between the third and fourth, or the fourth and fifth lumbar vertebrae. When the stilet is removed and it is seen that the fluid

is flowing, a 20 c. c. Luer syringe is attached to the needle by means of about 20 cm. of rubber tubing and the fluid allowed to run into the syringe by lowering it below the level of the needle until about 10 c. c. are collected. The salvarsanized serum is then added, thoroughly mixed by shaking the syringe and allowed to flow into the spinal canal by raising the barrel of the syringe.

A piece of adhesive plaster is placed over the wound and the patient instructed to keep his head low for 24 hours.

The only untoward symptoms are headache, pains in the back and radiating down the legs. These can usually be controlled by aspirin, but occasionally morphine is necessary.

DISCUSSION.

Dr. A. L. Carmichael (Little Rock): I would like to ask the essayist in closing, to state in the early attacks of tabes dorsalis, how he differentiates that condition from alcoholic neuritis.

Dr. Thompson (closing): The differentiation of tabes dorsalis and alcoholic neuritis would rest largely upon the laboratory findings, I think. Unless it is a typical case of tabes dorsalis, it cannot be diagnosed clinically. I think most cases must be diagnosed by the laboratory findings in the final analyses of the cases. I do not think it would be safe to rely upon salvarsanized serum, mercurized serum, salvarsan, mercury, or anything else to determine definitely the condition of your patient, without laboratory finding. Of course there is a very small number of cases of tabes that never show positive laboratory findings—Kaplan says as many as seven per cent. This I would be inclined to doubt from my limited experience in the number treated. There are cases, however, which by the time they are seen by the physician they do not show laboratory findings. In these cases the diagnosis must rest largely upon the history of the patient. If positive it is entitled to credence; but if negative it is practically of no value, because a large percentage of patients will deny the infection.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

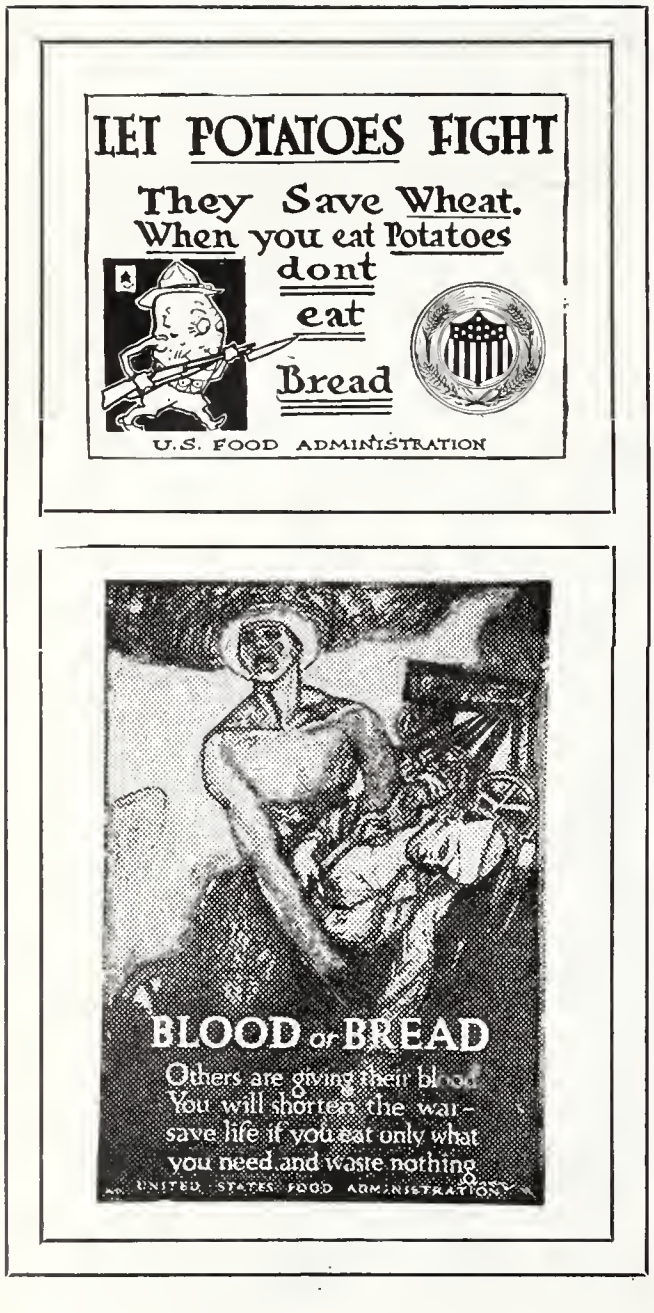
DR. WILLIAM R. BATHURST, EDITOR
810-812 Boyle Building, Little Rock, Arkansas.

Published monthly. Subscription $1.00 per year; single copies 25 cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under the act of Congress of March 3, 1879.

The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.



Editorials.

THE ANNUAL MEETING.

The May meeting, the Forty-Second Annual session of the Arkansas Medical Society, passed into history at Jonesboro on May 9, 1918, after three days spent profitably and pleasantly, for which thanks are due the good people of Jonesboro and Lake City.

There were in attendance a little over two hundred, which was excellent when war conditions are considered. Many members are now in the Medical Reserve Corps and those remaining at home are rather pressed with the inevitable additional work falling upon them.

New officers for the ensuing year were elected as follows:

President, Dr. E. F. Ellis, Fayetteville.

First Vice President, Dr. C. N. Phillips, Mena.

Second Vice President, Dr. H. H. Rightor, Helena.

Third Vice President, Dr. R. Y. Phillips, Malvern.

Secretary, Dr. C. P. Meriwether, Little Rock; (re-elected.)

Treasurer, Dr. Wm. R. Bathurst, Little Rock (re-elected).

Little Rock was named as the meeting place of the 1919 Convention.

FIRST DAY PROCEEDINGS.

The House of Delegates was called to order on Tuesday morning, May 7, by the president, Dr. William Breathwit. Dr. R. W. Ratliff, vice president of the Craighead County Medical Society, delivered the address of welcome. The president then named the committee on credentials, and routine business occupied the rest of the session, including reports of committees and the address of the president to the House of Delegates.

GENERAL SESSION.

The first general meeting was held on Tuesday afternoon. Mayor Frierson delivered the address of welcome on behalf of the city and W. W. Jackson welcomed the visitors on behalf of the Craighead County Medical Society, of which he is president. The response on behalf of the Arkansas Medical Society was made by G. A. Warren of Black Rock.

Dr. William Breathwit then delivered the president's annual address. His address will appear in the next issue and it will be found well worthy of perusal.

The scientific program occupied the rest of the session and several valuable papers were read and discussed, some of which will be printed in full in the Journal, from time to time, in the next several issues.

A PLEASANT OUTING.

On Tuesday evening the visitors were delightfully entertained in a manner somewhat out of the ordinary. On a special train the visitors including their ladies, many Jonesboro people and the Jonesboro band, were taken to Lake City to enjoy a fish fry in the open. The tables were laid by the river bank and they fairly groaned with delicious, fried fish, cornbread, coffee and other dainties prepared by the ladies of Lake City. Mayor Johnson of Lake City welcomed the visitors. Postmaster Gregg returned thanks for the entertainment and other brief addresses were made. The affair was hugely enjoyed by all present.

SURGEON GENERAL BLUE.

The day sessions on Wednesday were devoted chiefly to a continuation of the scientific program and routine business. The annual public meeting was held in the City Auditorium and the feature was the address of Surgeon General Rupert Blue, U. S. Public Health Service. Major John D. McLean, M. R. C., Secretary of the National Council of Defense also spoke on the Medical needs of the Army and Navy.

Surgeon General Blue spoke on the public health and stressed the necessity of co-ordination of the Federal, State, and Municipal Health bodies as well as the local medical societies and health boards in all measures concerning the public health, sanitation, prevention of the spread of communicable diseases, including venereal disorders, enforcement of sanitary laws, the establishment of free diagnostic laboratories by the State, the adoption of means to provide for the treatment and isolation of germ carriers, etc. Dr. Blue emphasized the necessity of enlisting public opinion on the side of sanitation and health measures in general, without which proper enforcement of such measures is rendered very difficult. Dr. Blue's address was of special interest and value in view of the assembling of large bodies of soldiers at the various cantonments, contiguous to cities. The health of the soldiers, their bodily vigor and powers of resistance, measurably depend on the citizens and public officials of the places near the camps, as well as upon the Federal health service officers.

On this branch of his subject which was, "War and Sanitation," Dr. Blue said:

"The great international struggles of past history have been of an almost purely military character, fought in the main by professional soldiers—although, of course, civil population have suffered enormously thereby. In the present world struggle an entirely new and unprecedented condition has arisen. It is a War of people, in which the non-combatant plays an important and even conspicuous part.

"Manifestly the quality of efficiency in any line of war endeavor must depend primarily upon the physical soundness of the individual. If a candidate for enlistment as a soldier be deemed incapable of satisfactory service because of bodily defects, it is equally true that a non-combatant civilian may be incapacitated for helpful war work by lack of health.

"Now that we have embarked in this war it is of the utmost importance—as a means of efficiency, be it understood—that we should know everything that can be ascertained about the prevalence of communicable diseases in this country, so that they may be successfully combated.

"The war has brought to light an alarming situation in regard to the social disease. Infections of this kind cause more invalidism in the army than any other group of maladies. They constitute the greatest of all public health problems, in peace no less than in war.

"To combat the social diseases is much more difficult than to fight any other group of infections; and for this there are several reasons. One main reason is to be found in the fact that the social evil is largely founded upon poverty, ignorance and lack of definite employment. The secrecy that has shrouded the discussion of these diseases has caused them to be ignored, and yet people upholding false ideals and entertaining mistaken conceptions of life and its obligations do not realize that their attitude is wholly selfish and that it markedly tends to augment and intensify dangers which threaten the welfare of future generations of Americans.

"In order to determine the best methods of controlling the social diseases, there have

been established in twenty extra-eantonment zones free dispensaries for the diagnosis and treatment of these infections."

In concluding his interesting and valuable address, Surgeon General Blue said:

"Our people must have health in order to be happy. Happy people are effieient people. The happy nation is effieient and endures. To win this war and make safe our future liberties, the health, not only of our fighting men, but of the people at large, must be conserved. When we have won the war, we shall have leisure to enjoy both the health we possess and the happiness we have earned."

The eonvention adjourned on Thursday, May 9, after the eleetion of offieers and choosing the next eonvention eity.

AN IMPERATIVE APPEAL FOR MEDICAL OFFICERS.

An urgent and imperative appeal has just been issued by the Surgeon General of the United States Army, for doctors for the Medical Reserve Corps.

There are today, 15,174 offieers of the Medical Reserve Corps on active duty and the Medieal Department has reached the limit of medieal officers at the present time available for assignment. With these faets before the medieal profession of this country, we believe that every doetor who is physieally qualified for service between the ages of 21 and 55 years, will come forward now and apply for a eommission in the Medieal Reserve Corps.

The Surgeon General says: "So far the United States has been involved only in the preparatory phase of this war. We are now about to enter upon the active or fighting phase, which will make enormous demands upon the resourees of the country." The eonservation of these resourees, especially that of man-power, depends entirely upon an adequate medieal service.

Drafts of men will continually follow drafts, each of which will require its proportionate number of medieal officers and there are at this time on the available list of the Medieal Reserve Corps, an insufficient number to meet the demands of these drafts.

The real necessity for the complete mobilization of the entire profession is imperative. It is not a question of a few hundred men volunteering for serviee, but of the mobilization of the profession for the eonservation of the resources of this eountry. Let every doctor who reads this editorial and appeal from the Surgeon General, which appeal is based upon dire neeessity, aet promptly and present his application for a eommission in the Medical Reserve Corps at the nearest Medieal Examining Board. If you are not informed of the location of your board, the Editor of this journal will advise you.

Editorial Clippings.

THE CALL FOR MEDICAL OFFICERS.

In The Journal two weeks ago appeared the announcement of Surgeon General Gorgas to the American Medical Association of the need of five thousand additional officers for the Medical Reserve Corps. Last week The Journal contained the report of the War Committee of the Association outlining the initial steps in the eampaign to seeure these five thousand volunteers. Already a most encouraging lot of letters have been reeeived from physicians asking for applieation blanks and for information relative to the service. Even before any systematic appeal has been made the medical profession is indieating that it stands ready to respond.

A number of physicians have stated their eircumstances and have asked The Journal to aid them in making a decision as to whether it is their duty under such and such eircumstances to volunteer. The physician who volunteers for the Medical Reserve Corps at this time does so under different circumstances than did the men who volunteered a year ago when our country entered the war. Constructive legislation in the intervening period have removed many of the diffieulties which at that time confronted the physieian who faeed the question as to whether or not he eould volunteer for service. Congress has since provided for the eare of dependents, for insuranee and eompensation, for inereased pay on foreign serviee, for eommutation of quarters, heat and light, for a moratorium on debts and leases of offieers in the service, and for reconstruction and reeducation of the disabled and injured. Army regulations now provide that offieers may purehase equipment direetly from the Quartermaster's Department. Physieians who entered the serviee over a year ago did so without the assuranee that this new legislation eonveys. They made greater saerifices than are required now.

The physician who comes into the Medical Reserve Corps today has probably been confronted with circumstances which prevented him from volunteering earlier. Many have hesitated because of fear as to the care of their dependents, of the inadequacy of the salary of a medical officer, of provision for their dependents in case of unfortunate disaster to themselves. To these men the Medical Department of the Army can now say that there is no longer cause for such fears and doubts.

The medical profession of Great Britain, well-nigh exhausted by the drains on its services, it is confidently stated elsewhere, will volunteer quickly to fill new demands. The American medical profession will do no less nobly. *The time has come for every medical man under 55 years of age, who is physically qualified, to consider seriously for himself the question of his duty to his government.*—Jour. A. M. A., April 27, 1918.

Personals and News Items.

Dr. H. O. Wilson has moved from Rison, Arkansas, to Hagerman, New Mexico.

Dr. S. L. Reveley has moved from Little Rock, Arkansas, to Marion, Texas.

Dr. John M. Wallace has moved from Fort Smith, Ark., to Houston, Tex.

Dr. C. P. Meriwether, Little Rock, attended the War Conference of Secretaries of the constituent State Association of the American Medical Association, April 30, at Chicago.

The State Medical Board of the Arkansas Medical Society met May 14, in the House Chamber at the State Capitol as an examining body for the inspection of 38 applicants who wish to practice medicine in Arkansas. Twenty of the applicants were from the medical department of the University of Arkansas, three were from Tennessee, one from Kentucky, one from Louisiana. Several negro graduates from Meharry College, Nashville, Tenn., also appeared for examination.

Drs. W. F. Smith, Little Rock, R. H. T. Mann, Texarkana; D. B. Luck, Pine Bluff; W. R. Brooksher, Fort Smith; Chas. M. Lutterloh, Jonesboro, and R. C. Dorr, Batesville, attended a conference of the General Medical Board of the National Conference of Defense, May 4-5, at Washington, D. C. The conference was called for the purpose of bringing to the attention of the physicians of the country the military needs of the Nation. Surgeon General Wm. C. Gorgas has called for 5,000 physicians immediately for the Medical Reserve Corps. Arkansas' quota will be 300 before July 1. The time has come for every medical man in Arkansas, under 55 years of age, to consider seriously for himself the question of his duty to his government. On request an application blank for the Medical Reserve Corps will be sent by Col. Chas. W. Gandy, Medical Corps, Commanding Army and Navy General Hospital, Hot Springs, or by the editor of this journal, Little Rock.

The Illinois Vigilance Association has issued four pamphlets on the problem of venereal diseases for inexpensive or free distribution, as circumstances may require. Copies will be sent free of charge to anyone sending a self-addressed and stamped envelope. The Association is a welfare organization incorporated "Not for Profit." The pamphlets are as follows: "Lord Kitchener's Instructions to Soldiers," "Three Great Army Records," "For Our Sons," a translation from the French, by Prof. Alfred Fournier, and "For Our Daughters," a translation from the French ,by Dr. Chas. Burlureaux, Member of the Society of Sanitary and Moral Prophylaxis of France.

Three Great Army Records and Prof. Fournier's pamphlet each contain unusual and extremely valuable information. Lord Kitchener's Instructions greatly improved conditions in India, while the pamphlet For Our Daughters is an excellent pamphlet on a difficult problem.

PHYSICIANS' ROLL OF HONOR FOR ARKANSAS.

In addition to the names of Arkansas physicians recommended for commissions in the Medical Reserve Corps, published in the last eight issues, the Surgeon General reports:

Henry Lawrence Gardiner, Little Rock, 1st Lieut.

Elmer Ellsworth Holt, Mena, Captain.

Jacob Brad Hesterly, Prescott, 1st Lieut.

Edwin Berry Buchanan, Texarkana, 1st Lieut.

PLAN FOR THE ORGANIZATION OF VOLUNTEER MEDICAL CORPS.

Scope and Purpose Explained in Letter Sent to Thousands of Qualified Physicians.

The Council of National Defense issues the following:

Dr. Franklin Martin, member of the advisory commission and chairman of the general medical board of the Council of National Defense, authorizes the following:

Following out the plans for organizing the volunteer medical service corps, to enlist the services of physicians ineligible for camp or field duty, the medical section of the Council of National Defense is sending to several thousand doctors a letter which says in part:

LETTER TO PHYSICIANS.

"The Council of National Defense has authorized and directed the medical section of the council to organize the physicians of the country who are ineligible for membership in the medical reserve corps on account of physical disability, over-age (55), civic or institutional needs, into the volunteer medical service corps. The members of this corps will be classified according to their ability to serve and will render aid to existing governmental agencies upon request of the Army, Navy, Public Health Service, American Red Cross, or the Council of National Defense.

"It is hoped that every physician who, for any of the reason enumerated above, is unable to enroll in the Medical Reserve Corps, will join the volunteer medical service corps. Since you have already indicated your desire to serve the Government by applying for a commission in the Medical Reserve Corps you are among the first to be sent an application blank which it is hoped you will fill out and return immediately to this office."

MAY LATER BECOME ELIGIBLE.

The blank provides for details as to reason for ineligibility to the Medical Reserve Corps as to educational and professional experience and other details. The fact is also recognized that rejected applicants for service in the Medical Reserve Corps may overcome the physical defects that led to rejection, and may therefore become eligible, or that the essential public or institutional needs may become less important as the extreme needs of the Army and Navy become apparent. Each physician is asked, therefore, to pledge himself to apply for a commission in the Medical Reserve Corps if at any time he becomes eligible.

With the letter goes a leaflet setting forth the rules of the organization.

MANAGEMENT OF THE CORPS.

The general management of the Volunteer Medical Service Corps is vested in a central governing board, which is a committee of the general medical board of the Council of National Defense, and the State governing boards consist of the State committees, medical section, Council of National Defense.

The procedure for joining is simple. The applicant returns his filled blank to the central governing board in Washington, and it is then referred to the proper State executive committee for its recommendations as to the qualifications of the applicant and as to the kind of work for which he seems most fitted.

The central governing board comprises the following: Dr. Edward P. Davis, president, Philadelphia; Dr. Henry H. Sherk, vice president, Pasadena; Dr. John D. McLean, acting secretary, Washington; Dr. Edward H. Bradford, Boston; Dr. Truman W. Brophy, Chicago; Dr. Duncan Eve, Sr., Nashville; Dr. William Duffield Robinson, Philadelphia; Dr. George David Stewart, New York City; Dr. Franklin Martin, Chicago, and Dr. F. F. Simpson, Pittsburgh, are members ex officio.—The Official Bulletin.

THE CHICAGO SESSION OF THE AMERICAN MEDICAL ASSICIATION.

Section on Miscellaneous Topics to Consider Reeducation and Rehabilitation of Disabled Soldiers.

At its recent meeting the Council on Scientific Assembly arranged for meetings of the Section on Miscellaneous Topics, the subject to be taken up being the reeducation and rehabilitation of the disabled soldiers. Major Frank Billings, head of this division in the Surgeon-General's Office, has accepted the chairmanship of the section. The subject is one of great importance, especially to medical men.

SPECIAL GENERAL MEETING.

In addition to the patriotic meeting which will be held on Thursday evening, June 13, and which will be addressed by men prominent in public affairs, there will also be a

general meeting on Wednesday evening, June 12, at which eminent physicians who have been active in the medical military service of our nation and its allies will take part.

SECTION MEETING PLACES.

The tentative arrangments for places of meeting are as follows:

Section on Practice of Medicine.—Banquet room, Hotel Morrison.

Sections on Ophthalmology and on Laryngology, Otology and Rhinology.—Grand Ball Room and Red Room respectively, Hotel La Salle..

Sections on Nervous and Mental Diseases and on Dermatology.—Ball Room and English Room respectively, Blackstone Hotel.

The remaining sections will be grouped, meeting in the Auditorium Theater, the Auditorium Hotel and the Congress Hotel. The theater will house in its main auditorium, the Section on Surgery, General and Abdominal, and in two smaller halls, the Sections on Genito-Urinary Diseases and on Gastro-Enterology and Proctology.

In the Auditorium Hotel, the Ball Room will be the meeting place of the Section on Pathology and Physiology, the Ladies' Parlor the meeting place of the Section on Pharmacology and Therapeutics, and the Section on Preventive Medicine and Public Health will meet in the banquet hall.

In the Congress Hotel, the Elizabethan Room will be the meeting place of the Section on Orthopedic Surgery and the Gold Room, the Section on Obstetrics, Gynecology and Abdominal Surgery; the Florentine Room, the Section on Diseases of Children, and the Green Room, the Section on Stomatology.

The Hotel Sherman will be the general headquarters where will be housed the Registration Bureau, the Information Bureau, the American Medical Association Branch Postoffice, as well as the Scientific and Commercial Exhibits.

DETAILED INFORMATION ON HOW TO OBTAIN OFFICER'S COMMISSION IN MEDICAL CORPS.

Dr. Franklin Martin, member of the Advisory Commission and chairman of the General Medical Board of the Council of National Defense, authorizes the following:

Such questions as doctors seeking to enlist in the Medical Service of the Army or Navy are likely to ask, are answered in the comprehensive questionnaire which is being sent out by the Medical Section of the Council of National Defense. The questionnaire is subdivided into sections relating to both Army and Navy, to Army only, to Navy only, and to the Regular Army.

In view of the campaign now under way for medical officers, the complete text of the questionnaire is given herewith:

COUNCIL OF NATIONAL DEFENSE, MEDICAL SECTION.

The Surgeon General of the Army and the Surgeon General of the Navy need more medical officers. Our profession has responded nobly to the call of humanity, but more are required. You are needed. The following questions and answers will aid you in your decision:

INFORMATION RELATING TO BOTH ARMY AND NAVY.

(1) Q. How do I apply for a commission in the Medical Reserve Corps?

A. Write to the Surgeon General of the Army or Navy, the Council of National Defense, or for the Army appeal direct to an examiner for the Medical Reserve Corps. Detailed information will then be furnished.

(2) Q. What is the character of examinations?

A. Fill out the application form supplied by the Army, or in the form indicated by the Navy, then submit to a physical and professional examination. All papers when completed, will be forwarded by the examiner to the Surgeon General's Office with a definite recommendation as the result of the physical and medical findings.

(3) Q. What provisions are made for myself and family in the event of injury or death?

A. Allowances will be made in case of injury or death according to the war-risk insurance act. These are arranged according to a schedule of the number of the officer's dependents.

COST OF EQUIPMENT.

(4) Q. What will be the cost of equipment?

A. The average cost of the necessary equipment in the Army is about $250, although even this amount is not absolutely necessary. The Navy provides an allowance

of $150 to cover this cost. This is paid to the officers on his first reporting for duty|

(5) Q. What is the time allowed for reporting after notification that I will be assigned to duty?

A. Fifteen days, with few exceptions, and then only when necessity demands.

(6) Q. What will I do when orders are received?

A. Obey explicitly.

(7) Q. What will be the character of orders received?

A. You will probably be sent to a medical military training camp for instructions.

(8) Q. How soon will the call for active duty be received?

A. If a request for immediate service is made, it will probably be granted. If you do not request immediate service, you will be given 15 days in which to arrange your home affairs from the time you receive the notification that you will be assigned to duty until the day you are to report. However, do not discontinue the practice of medicine until you are notified that your services are needed.

(9) Q. How can I secure immediate service?

A. Write to the Surgeon General of the Army or Navy, Washington, D. C., making such a request, stating at the same time your qualifications for special service.

PRESENT NEED FOR OFFICERS.

(10) Q. Is there an urgent need for medical officers now?

A. The present inactive Reserve Corps of both Army and Navy is practically negligible and consists of officers enrolled but engaged in hospital intern ships and other absolutely necessary present duties, with which there is no desire to interfere any more than is necessary, and of those retained by different departments for special duties. The Reserve, therefore, has been exhausted and it has been estimated that there is an absolute need now for 1,000 more medical officers in the Navy and 5,000 more medical officers in the Army.

(11) Q. What will be the character of service?

A. Every effort is made so far as possible to place an officer where his special talents will be best utilized, and his wishes with regard to such assignments are accorded every consideration.

(12) Q. When shall I discontinue the practice of medicine?

A. Not until notice is received from the Surgeon General to be prepared for active duty on or about a certain date.

INFORMATION RELATING TO ARMY.

(13) Q. What are the requirements for a commission?

A. An applicant for an appointment in the Army must be a citizen of the United States between 22 and 55 years of age, a graduate of a reputable medical school legally authorized to confer the degree of doctor of medicine; he must have qualified to practice medicine and be in the active practice of his profession.

(14) Q. How do I accept a commission?

A. A notice will be received from The Adjutant General of the Army stating that you have been recommended for a commission. Sign the oath of office, take an affidavit before a notary public, and send it with a note of acceptance of commission to The Adjutant General of the Army, Washington, D. C., and at the same time send a note to the Surgeon General of the Army stating that you have accepted your commission (here note the rank). In the same letter request immediate service if desired.

(15) Q. When do I become an officer of the Medical Reserve Corps?

A. When the oath of office, together with a note stating that you will accept the commission offered in the Army, is received and is of record in the Office of The Adjutant General of the Army, Washington, D. C.

PAY AND TERM OF SERVICE.

(16) Q. For what length of time do I volunteer?

A. In the Army, five years.

(17) Q. What pay do officers receive?

A. A Lieutenant, $2,000; captain, $2,400; major, $3,000; plus 10 per cent for foreign service. Under the new act just signed by the president, if quarters are not available as a place of abode for wife, child, or dependent parent, each commissioned officer of the Army shall also be paid commutation at the rate

authorized by law—first lieutenant, $432; captain, $576; major, $720.

(18) Q. What are the expenses for field service?

A. From $25 to $50 per month.

(19) Q. How many medical officers were on active duty April 26, 1918?

A.

Army.

Regular Medical Corps	843
Medical Reserve Corps	16,359
Medical Corps, National Guard	1,204
Medical Corps, National Army	111

(20) Q. What is the average number of physicians in each thousand discharged from the Medical Reserve Corps of the Army, and for what reasons?

A. Physical disability, 31; inaptitude, 13; domestic and community needs, 4; deaths, 3; resignations, 10.

INFORMATION RELATING TO NAVY.

(21) Q. What are the requirements for a commission?

A. An applicant for appointment in the Navy must be a citizen of the United States, graduate of a reputable medical school, between the ages of 21 and 44 years; the grade given is assistant surgeon, with the rank of lieutenant, junior grade (corresponding to first lieutenant in the Army).

(22) Q. How do I accept a commission?

A. A notice will be received from the Surgeon General of the Navy stating that you have been recommended for a commission. Sign the oath of office, which will be supplied, take an affidavit before a notary public and forward it with a note of acceptance of commission to the Surgeon General of the Navy, Washington, D. C. In the same letter request immediate service, if desired.

(23) Q. When do I become an officer of the Medical Reserve Corps?

A. When the oath of office, together with a note stating that you will accept the commission offered in the Navy is received and is of record in the Bureau of Navigation, Navy Department, Washington, D. C.

(24) Q. For what length of time do I volunteer?

A. In the Navy 4 years, or for the duration of the war.

(25) Q. How many medical officers are on active duty?

A.

Navy.

Regular Medical Corps	844
Medical Reserve Corps, Medical Reserve Force, Medical Corps, Naval Militia, Retired Medical Officers	1,150

INFORMATION RELATING TO REGULAR ARMY.

(1) Q. How do I apply for a commission in the Regular Medical Corps of the Army?

A. Write to the Surgeon General, United States Army, Washington, D. C., and detailed information will be furnished.

(2) Q. Are there any vacancies in the Regular Medical Corps of the Army?

A. 1,100.

(3) Q. What is the character of questions?

A. Full information concerning the examination may be secured upon application to the "Surgeon General, United States Army, Washington, D. C." The essential requirements to securing an invitation to report for examination are that the applicant shall be a citizen of the United States, between 22 and 32 years of age, a graduate of a medical school legally authorized to confer the degree of doctor of medicine, of good moral character and habits, and shall have had at least one year's post-graduate hospital internship.

(4) Q. What commission will I receive?

A. Those applicants who successfully pass the examination are commissioned first lieutenants in the Medical Reserve Corps, and sent to either the Army Medical School in Washington or to a training camp for a course of instruction, covering a period of approximately three months, during which time they draw the pay and allowances of their grade. If, at the close of their instruction, they pass the final examination, and are favorably recommended, they are commissioned first lieutenants in the Medical Corps of the Regular Army.

PAY IN THE REGULAR ARMY.

(5) Q. What is the pay?

A. To each rank is attached a fixed annual salary, which is received in monthly payments, and this is increased by 10 per cent

for each period of 5 years' service until a maximum of 40 per cent is reached. A first lieutenant receives $2,000 per annum, or $166.66 monthly. At the end of 5 years (during the period of the war, at the end of one year) he is promoted to captain, subject to examination, and receives $2,400 a year, with an increase of 10 per cent after 5 years' service, making $2,640, or $220 per month. After 10 years' service the pay would be $2,880 annually, or $240 per month. The pay attached to the rank of major is $3,000 a year, which, with 10 per cent added for each 5 years' service, becomes $3,600 after 10 years' service, $3,900 after 15 years' service, and $4,000 after 20 years.

(6) Q. What are my prospects for advancement?

A. During the existing emergency a first lieutenant of the Medical Corps, United States Army, is required to complete only one year's service, instead of the 5 years' provided for by the act of June 3, 1916, to become eligible for promotion to the grade of captain, subject to examination.

(7) Q. What are the arrangements for retirement?

A. Officers of the Medical Corps are entitled to the privilege of retirements after 40 years' service, or at any time for disability incurred in the line of duty. On attaining the age of 64, they are placed on the retired list by operation of law. Retired officers receive three-fourths of the pay of their grade (salary and increase) at the time of retirement.—The Official Bulletin.

HOME PASTEUR TREATMENT.

And in that town a dog was found,
As many dogs there be,
Both mongrel, puppy, whelp and hound,
And curs of low degree.

—*Goldsmith.*

Like the poor we have always the dog with us. All the kinds designated by the poet are with us—and then some. We have in Arkansas many fine specimens of man's most faithful friend and a multitude of worthless curs. In the last few years there has been much rabies in the State. Also there have been many false cries of "mad dog!" Raise the cry and the dog is as good as dead. Often it is unfortunate that the dog is killed on suspicion. Many an ill-tempered dog snapping at people has been killed as mad when such has proved not the case. The dog should be confined if possible, and watched for the real symptoms of rabies. Frequently a dog is killed and those it has bitten are scared half to death for long afterward when had it been found the dog was not mad there would have been no uneasiness. But if the dog is killed the head should at once be cut off and sent for laboratory tests packed in ice in a water tight bucket.

Heretofore people bitten by mad dogs have been put to much expense, trouble and waste of time in going to some distant city to obtain Pasteur treatment. This is no longer necessary. Dr. Gradwohl of the Pasteur Institute of St. Louis has arranged to send treatment by mail, and it is said to be just as efficacious as that administered at the institute. Attention is called to the page advertisement, giving full directions in the April issue of the Journal.

New and Nonofficial Remedies.

CRESOL-MERCK.—A brand of cresol, U. S. P. Merck and Co., New York.

GUAIACOL CARBONATE-MERCK.—A brand of guaiacol carbonate, U. S. P. Merck and Co., New York.

ORIGINAL TUBERCULIN, "O. T.."—Marketed in 1 c. c. vials. Gilliland Laboratories, Ambler, Pa.

QUININE DIHYDROCHLORIDE-MERCK. — A brand of Quinine dihydrochloride, U. S. P. Merck and Co., New York.

QUININE AND UREA HYDROCHLORIDE-MERCK. —A brand of Quinine and Urea hydrochloride, U. S. P. Merck and Co., New York.

BOUILLON FILTRATE TUBERCULIN, "B. F." —Marketed in 1 c. c. and 3 c. c. vials. Gilliland Laboratories, Ambler, Pa.

BACILLEN EMULSION TUBERCULIN, "B. F." —Marketed in 1 c. c. and 3 c. c. vials. Gilliland Laboratories, Ambler, Pa.

TUBERCULIN RESIDUE, "T. R."—Marketed in 1 c. c. and 3 c. c. vials. Gilliland Laboratories, Ambler, Pa.

THYMOL IODIDE-MERCK.—A brand of thymol iodide, U. S. P. Merck and Co., New York (Jour. A. M. A., April 27, 1918, p. 1225.)

Normal Horse Serum.—Marketed in syringes each containing 10 c. c.; also in ampules containing from 10 to 100 c. c. as ordered. Gilliland Laboratories, Ambler, Pa.

Smallpox Vaccine.—Marketed in sealed capillary tubes, in packages containing one, five and ten tubes each. Gilliland Laboratories, Ambler, Pa.

Gilliland's Concentrated and Refined Diphtheria Antitoxin.—Marketed in syringes containing each 1,000, 3,000, 5,000, 7,500, 10,000, 15,000 and 20,000 units. Gilliland Laboratories, Ambler, Pa.

Gilliland's Concentrated and Refined Tetanus Antitoxin.—Marketed in syringes containing each 1,500, 3,000 and 5,000 units, Gilliland Laboratories, Ambler, Pa. (Jour. A. M. A., April 20, 1918, p. 1159.)

Tuberculin Ointment in Capsules (For the Moro Percutaneous Diagnostic Test).—An ointment consisting of tuberculin "Old" and anhydrous wool fat, equal parts. Marketed in capsules sufficient for one test. Gilliland Laboratories, Ambler, Pa.

Tuberculin for the Detre Differential Diagnostic Test.—Consisting of one tube each of Original Tuberculin "O. T.", Bouillon Filtrate Tuberculin "B. F." human, and Bouillon Filtrate Tuberculin "B. F.", bovine. Gilliland Laboratories, Ambler, Pa.

Dichloramine-T (Monsanto).—A brand of dichloramine-T complying with the standards of New and Nonofficial Remedies. For a description of the actions, uses, dosage and chemical and physical properties see New and Nonofficial Remedies, 1918, p. 157. Monsanto Chemical Works, St. Louis Mo. (Jour. A. M. A., April 6, 1918, p. 999.)

Typhoid Vaccine.—Marketed in packages containing three syringes, the first containing 500 million killed typhoid bacilli and the second and third containing each 1,000 million killed typhoid bacilli; in packages containing three ampules, the first containing 500 million killed typhoid bacilli, and the second and third containing each 1,000 million killed typhoid bacilli; also in ampules containing from 5 to 100 c. c. of the vaccine as ordered. Gilliland Laboratories, Ambler, Pa.

Propaganda for Reform.

Hall's Catarrh Cure.—Another victim fails to get the one hundred dollars offered in cases in which this preparation failed to effect a cure. The promoters informed its victim that before paying the guarantee, he would have to prove that his case was one of simple catarrh not complicated by any other disease and that he had taken sufficient of the cure (Jour. A. M. A., April 13, 1918, p. 1113).

Unduly Toxic Arsphenamin.—In view of the reports in current medical literature of untoward results from the use of arsphenamin and neoarsphenamin, Dr. G. W. McCoy, Director of the U. S. Hygienic Laboratory, Washington, D. C., requests that samples of any lot of these arsenicals which have shown undue toxicity be forwarded to the Hygienic Laboratory for examination (Jour. A. M. A., April 13, 1918, p. 1110).

Antipneumococcus Vaccine.—The work by Lister in the diamond mines of Kimberly, South Africa, gives promise of a successful method of inoculation against lobar pneumonia. Lister finds that the pneumonia prevalent among the workers in the diamond mines is due mainly to three groups of pneumococci, and that inoculation with a vaccine made from the three groups prevents the occurrence of pnuemonia as caused by members of these groups (Jour. A. M. A., April 20, 1918, p. 1163).

Neoarsphenamine.—The Federal Trade Commission has granted an importing license to the Diarsenol Company, Inc., 475 Ellicott Square, Buffalo, for neodiarsenol, the Canadian brand of neoarsphenamine. Licenses to manufacture neoarsphenamine have also been issued to The Takamine Laboratories, New York, to the Farbwerke-Hoechst Co., New York, and to the Dermatological Research Laboratories, Philadelphia. The safest and most effective products, provided one has mastered the technique, are the arsphenamines —not the neoarsphenamines (Jour. A. M. A., April 6, 1918, p. 1027).

The Toxicity of Arsphenamin (Salvarsan).—James C. Sargent, Milwaukee, Wis.,

and J. D. Willis, Roanoke, Va., report untoward effects from the intravenous administration of American-made salvarsan (arsphenamin). Such experiences are not unusual, but should be reported. Untoward results followed the use of the German salvarsan. Such reactions may be due to faulty preparation, to deterioration of certain ampules of a batch, to idiosyncrasy of the patient or to faulty technic or preparation or injection. There is no reason to believe that the arsphenamin made in this country is more toxic or less satisfactory than that formerly imported from abroad (Jour. A. M. A., April 27, 1918, p. 1254).

GUAIODINE.—Examination of Guaiodine, a preparation of the Intravenous Products Co., Denver, in the A. M. A. Chemical Laboratory shows that, instead of containing free "colloidal" iodin as claimed, the preparation is essentially an iodated fatty oil, containing only combined iodin. The referee of the Committee on Pharmacology reported to the Council on Pharmacy and Chemistry that equally misleading, in view of the Laboratory's findings, are the implied claims that the antiseptic action of Guaiodine corresponds to that of free iodin. Guaiodine is advertised chiefly for the treatment of gonorrhea by means of obviously false claims. The Council declared Guaiodine inadmissible to New and Nonofficial Remedies because of false statements as to composition and action (Jour. A. M. A., April 6, 1918, p. 1026).

NEUROSINE AND THE ORIGINAL PACKAGE EVIL.—Neurosine advertisements ask that only original bottles of Neurosine be dispensed when physicians prescribe the nostrum. The reason is obvious: the bottle has the name blown in the glass and thus is an invitation to the patient to purchase more on his own initiative and also to recommend the preparation to his friends. The danger to the public from the self-administration of mixtures of bromides, such as Neurosine, is obvious. Neurosine is said to contain potassium bromid, sodium bromid, ammonium bromid, zinc bromid, extract of lupulin, fluid extract cascara sagrada, extract of henbane, extract of belladonna, extract of cannabis indica, oil of bitter almond and aromatic elixir. This chemical blunderbuss has been advertised for use in insomnia, hysteria, neurasthenia, migraine, etc., etc. It has also been recommended for children suffering from chorea. In all the years that Neurosine has been exploited to physicians with such remarkable claims, we have never seen a report of a careful clinical study in which the product has been used under the conditions which scientific investigation demands. (Jour. A. M. A., April 27, 1918, p. 1251.)

AMERICAN-MADE ACETYLSALICYLIC ACID.—At the request of the Council on Pharmacy and Chemistry an examination of the market supply of American-made acetylsalicylic acid has been made in the A. M. A. Chemical Laboratory by P. N. Leech. The investigation shows that there are on the American market, made by American firms, several brands of acetylsalicylic acid that are just as good as, if not better than, the widely advertised Aspirin-Bayer. About a year ago the Council on Pharmacy and Chemistry deleted Aspirin-Bayer from New and Nonofficial Remedies. Since the Bayer aspirin patent expired in February, 1917, thereby making it possible for manufacturers legally to produce and sell acetylsalicylic acid in the United States, the Council established standards for the quality of this unofficial drug. As a result, the following products have been found to meet these requirements and are included in New and Nonofficial Remedies: Aspirin-L. and F., Acetylsalicylic Acid-Squibb, Acetylsalicylic Acid-Merck, Acetylsalicylic Acid-Milliken, Acetylsalicylic Acid-M. C. W., Acetylsalicylic Acid-Monsanto, and Acetylsalicylic Acid-P. W. R. (Jour. A. M. A., April 13, 1918, p. 1097).

SOME NOSTRUMS.—Continuing its policy of giving the public the facts in regard to worthless, injurious or misleadingly advertised nostrums, the Louisiana State Board of Health has analyzed the following "patent medicines": Dermillo, a skin and complexion nostrum composed of zinc oxid, calcium carbonate, starch and salicylic acid in water, colored and perfumed. Wendell's Ambition Pills, a "great nerve tonic," containing strychnin, ferric oxid, pepper, cinnamon and ginger, and probably a little aloes. Orchard White, a toilet preparation to be mixed with lemon juice, reported to be a mucilage containing bismuth citrate, boric acid, alcohol and gum tragacanth. Exelento Quinine Pomade, a hair preparation found to consist chiefly of petrolatum, some liquid petrolatum, a trace of oil of gaultheria, sulphur, and among other things, a trace of quinin. Sloan's Liniment,

which appeared to be composed essentially of oil of turpentine, oil of camphor, oil of sassafras and capsicum. Vick's Vap-O-Rub, which appeared to be a mixture of petrolatum with camphor, menthol and oil of thyme, eucalyptus and turpentine. La Creole Hair Dressing, a perfumed solution containing lead acetate, sulphur and glycerin, alcohol and water. Prescription A 2851 for Rheumatism, formerly said to have been known as Eimer and Amend's Rheumatic Remedy, which appeared to be a sherry wine containing 7.5 per cent. potassium iodid (Jour. A. M. A., April 6, 1918, p. 1024).

Misbranded Nostrums.—The following are some "patent medicines" which the federal authorities held to be sold under false claims: Ascatoo, containing 13 per cent alcohol and some opium. Mexican Oil, containing over 57 per cent alcohol, together with essential oils, glycerin, red pepper, emodin, menthol and a small amount of opium alkaloids. Persil, containing 40 per cent alcohol. Though claimed to contain, in addition, asparagus, parsley, celery, buchu, juniper berries, it contained no appreciable quantities of celery, buchu, juniper, asparagus or parsley. Dr. D. Kennedy's Favorite Remedy, containing 18 per cent alcohol, nearly 50 per cent sugar, and over 4 per cent potassium acetate, with methyl salicylate, aloes, licorice and oil of sassafras. Our Standard Remedy, tablets containing rhubarb, senna, scoparius, licorice, red pepper and some ammonia compound with indications of aloes. Dr. King's Throat and Lung Balsam, claimed to relieve coughs and colds and consumptive patients in the last stages of the disease. "White Pine Expectorant" and "White Pine Balsam" (Allan-Pfeiffer Chemical Co.), a syrup containing alkaloid (probably morphin), chloroform, alcohol, benzoic acid and plant extract, but no extract of tar of white pine. California Tuna Tonic Tablets, pills containing iron carbonate and a small quantity of nux vomica alkaloids (strychnin, etc.). Alorine Antiseptic Suppository, containing quinin sulphate, boric acid and tannic acid. St. Joseph's Quick Relief, containing 32 per cent alcohol with Peru balsam, camphor and red pepper. "Andrews' Wine of Life Root or Female Regulator", containing over 14 per cent alcohol, sugar, methyl salicylate and tannin. "Andrews' Wine of Life Root Annex Powders", composed of sodium chloride and sodium bicarbonate, with a small amount of sodium carbonate. Clark Stanley's Snake Oil Liniment, a light mineral oil mixed with about 1 per cent of fatty oil, red pepper and possibly a trace of camphor and turpentine (Jour. A. M. A., April 20, 1918, p. 1183).

County Societies.

LAWRENCE COUNTY.

The Lawrence County Medical Society met at 4:00 p. m. May 2, in the office of T. C. Neece at Walnut Ridge. The meeting was called to order by the president, G. A. Warren. The minutes of the previous meeting were read and approved. Present: C. A. Ball, W. W. Hatcher, A. G. Henderson, J. C. Hughes, J. C. Land, J. W. Morris, H. R. McCarroll, T. C. Neece, W. J. Robinson, J. M. Stephens, Earle Thomas and C. C. Townsend. J. A. Ramsey of Dallas, Texas, was a visitor at the meeting, guest of J. W. Morris.

Dr. J. C. Hughes reported a case of an abscess involving the pectoral muscles which was thought by some to be tubercular as the family had a tubercular history and the fact that it seemed to be slow in healing. The secretary reported a case of a burn treated by the new paraffin treatment using parasine with gratifying results.

G. A. Warren, being one of the essayists, read a paper on "Vital Statistics," giving its importance and urging all of the physicians to be careful that all of the reports were carefully made and sent in. W. W. Hatcher was another essayist, and read a paper on the treatment of burns. He also laid great stress upon the superiority of the paraffin treatment over all other methods used before the war and urged its immediate adoption. Ordinary varnish brushes or the wing feathers of fowl may be used with excellent results when other accessories are not available for its application. Both papers were fully discussed. The time for the meeting was short, but was well used and seemed to be enjoyed by all present.

Book Reviews.

The Way Out of War.—Notes on the biology of the subject.. By Robert R. Morris, F. A. C. S. Published by Doubleday, Page & Company, Garden City, N. Y. Price $1.00.

The well known author of the book discusses the theory that war is caused by Man's de-

fective brain, and that as the sociologist and the psychologist both have failed in their effort to get at the true source of the matter, it is the work for the biologist.

Progressive Medicine.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D. Vol. XX, No. 4. December, 1917. Published by Lea & Febiger, Philadelphia, Pa. $6.00 per annum.

Among the interesting articles in this issue we wish to mention Dr. Bloodgood's review on military surgery. He refers to "Military Medical Schools," Medical Officers' Training Camps and other subjects of unusual interest to the profession at this particular time.

Diseases of Women.—By H. S. Crossen, M. D., F. A. C. S. Associate in Gynecology, Washington University and Barnes Hospital. Fourth edition, revised and enlarged. With eight hundred engravings. Published by C. V. Mosby Company, St. Louis, 1917. Price, $7.50.

This book is devoted exclusively to the diagnosis and treatment of Diseases of Women as are met with in the office and at the bedside by the general practitioner. Previous editions have proven very popular. The chapter on the Ductless Glands has greatly increased the value of this edition over previous ones.

A Pocket Formulary.—By E. Quin Thornton, M. D., Assistant Professor of Materia Medica in the Jefferson Medical College, Philadelphia. Eleventh edition, revised. Published by Lea & Febiger, Philadelphia. Price $2.00.

In this book we find diseases arranged alphabetically, and under each are given what the author believes to be the most efficacious prescriptions for simple cases as well as for the various stages and complications. It is not intended, however, to replace individual thought on the part of the practitioner, whose diagnosis of each must govern the character, quantity, combination and method of administering the remedies selected.

Military Orthopedic Surgery.—Prepared by the Orthopedic Council to the Surgeon General. Illustrated. Published by Lea & Febiger, Philadelphia. 1918. Price $1.50.

In the eleven chapters of this manual the following subjects are considered: The Human Foot; The Shoe and the Military Shoe; The Disabilities of the Soldier's Foot and Their Treatment; Injuries to Joints and their Treatment; Position of Election for Ankylosis Following Gunshot Injuries of Joints; The Spine; Methods of Treatment for Disabilities Following Nerve Injuries; United and Malunited Fractures; Bone Grafting; Methods of Fixation.

Impotency, Sterility, and Artificial Impregnation.—By Frank P. Davis, Ph. B., M. D. Published by C. V. Mosby Company, St. Louis, Mo. Price, $1.25.

The thirteen chapters of this book are as follows: The Sexual Instinct; The Sense of Smell; The Voice, and Sense of Hearing; The Sense of Sight; Impotency; Psychic Impotency; Masturbation and Emisions; Treatment of Impotency; Race Suicide; Sterility; Treatment of Sterility; Artificial Impregnation; Therapeutics. The author gives such facts as he has been able to glean in a number of years' active practice in such a succinct form that the reader can not help but grasp some valuable information from this book.

The Spleen and Anemia.—Experimental and clinical studies, by R. M. Pearce, M. D., Professor of Research Medicine, with the assistance of E. B. Krumbhaar, M. D., Assistant Professor of Research Medicine and C. H. Frazier, M. D., Professor of Clinical Surgery, University of Pennsylvania. Sixteen illustrations, color and black and white. Published by J. B. Lippincott Company, Philadelphia. Price $5.00.

This book considers the relation of the spleen to blood destruction and regeneration nd a therapeutic procedure in the treatment of diseases accompanied by anemia. Part I describes the experimental studies by Dr. Pearce. Part II gives the clinical observations by E. B. Krumbhaar and Part II describes the surgical observations by Chas. H. Frazier.

The Surgical Clinics of Chicago.—Volume I, No. 4 (December, 1917) Index Number. Octavo 245 pages, 89 illustrations. Published bi-monthly by W. B. Saunders Company, Philadelphia. Price per year: Paper, $10.00; cloth, $14.00.

In this volume an instructive article on Blastomycosis and Sporotrichosis is given by Dr. A. H. Montgomery in the Clinic of Dr. Dean Lewis, Presbyterian Hospital. These diseases are usually seen by the dermatologists, however, in some instances surgical measures must be resorted to, because the lesion has spread and resisted other lines of treatment.

Dr. Montgomery describes the clinical history, diagnosis and treatment, illustrating three cases. These patients were given increasing doses of potassium iodide. In one case described the dose was increased to 700 grains a day.